10-EY12NMA009ME30-LS28F14T
datasheet

Vincotech

flow**MNPC E2 SiC**	**1200 V / 8,67 mΩ**

Topology features

- Kelvin Emitter for improved switching performance
- Temperature sensor
- Mixed Voltage Neutral Point Clamped Topology (T-Type)

Component features

- Fast intrinsic diode with low reverse recovery
- High blocking voltage with low on-resistance
- High speed switching with low capacitance

Housing features

- Base isolation: Al_2O_3
- Convex shaped substrate for superior thermal contact
- Compact housing
- CTI600 housing material
- Thermo-mechanical push-and-pull force relief
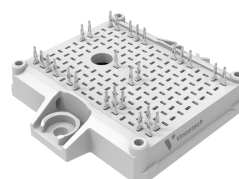- Press-fit pin
- Reliable cold welding connection

Target applications

- Charging Stations
- Industrial Drives
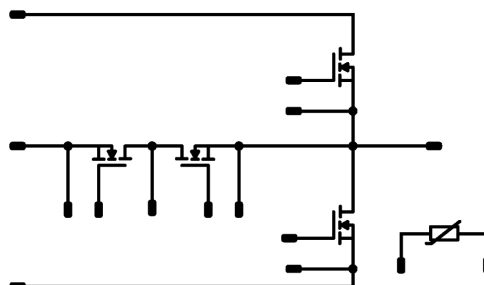- Power Supply
- Solar Inverters
- UPS

Types

- 10-EY12NMA009ME30-LS28F14T

flow E2 12 mm housing

Schematic

Maximum Ratings

T_j = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions		Value	Unit
Buck Switch					
Drain-source voltage	V_{DSS}			1200	V
Drain current (DC current)	I_D	$T_j = T_{jmax}$	T_s = 80 °C	104	A
Peak drain current	I_{DM}	t_p limited by T_{jmax}		456	A
Total power dissipation	P_{tot}	$T_j = T_{jmax}$	T_s = 80 °C	188	W
Gate-source voltage	V_{GSS}	static		-4 / 15	V
		dynamic		-8 / 19	V
Maximum Junction Temperature	T_{jmax}			175	°C
Boost Switch					
Drain-source voltage	V_{DSS}			1200	V
Drain current (DC current)	I_D	$T_j = T_{jmax}$	T_s = 80 °C	104	A
Peak drain current	I_{DM}	t_p limited by T_{jmax}		456	A
Total power dissipation	P_{tot}	$T_j = T_{jmax}$	T_s = 80 °C	188	W
Gate-source voltage	V_{GSS}	static		-4 / 15	V
		dynamic		-8 / 19	V
Maximum Junction Temperature	T_{jmax}			175	°C

Module Properties

Thermal Properties

Parameter	Symbol	Conditions	Value	Unit
Storage temperature	T_{stg}		-40…+125	°C
Operation temperature under switching condition	T_{jop}		-40…+(T_{jmax} - 25)	°C

Isolation Properties

Parameter	Symbol	Conditions		Value	Unit
Isolation voltage	V_{isol}	DC Test Voltage*	t_p = 2 s	6000	V
Creepage distance				>12,7	mm
Clearance				9,08	mm
Comparative Tracking Index	CTI			≥ 600	

*100 % tested in production

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Characteristic Values

Parameter	Symbol	Conditions				Values			Unit
		V_{GE} **[V]** V_{GS} **[V]**	V_{CE} **[V]** V_{DS} **[V]** V_{F} **[V]**	I_{C} **[A]** I_{D} **[A]** I_{F} **[A]**	T_{j} **[°C]**	**Min**	**Typ**	**Max**	

Buck Switch

Static

Parameter	Symbol								Unit
Drain-source on-state resistance[1]	$r_{DS(on)}$	15		114	25 175	6,07	8,67 16,34	11,3[1]	mΩ
Gate-source threshold voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}$		0,0321	25	1,8	2,7	3,6	V
Gate to Source Leakage Current	I_{GSS}	15	0		25		30	750	nA
Zero Gate Voltage Drain Current	I_{DSS}	0	1200		25		3	150	µA
Internal gate resistance	r_{g}						1,37		Ω
Gate charge	Q_{g}	-4/15	800	114	25		408		nC
Short-circuit input capacitance	C_{iss}						10410		
Short-circuit output capacitance	C_{oss}	f = 100 kHz	0	1000	0	25		330	pF
Reverse transfer capacitance	C_{rss}						27		
Diode forward voltage	V_{SD}	0		58,5	25		4,8		V

Thermal

Parameter	Symbol								Unit
Thermal resistance junction to sink[2]	$R_{th(j-s)}$	λ_{paste} = 5,2 W/mK (PTM)					0,51		K/W

Characteristic Values

Parameter	Symbol	Conditions				Values			Unit
		V_{GE} [V] V_{GS} [V]	V_{CE} [V] V_{DS} [V] V_{F} [V]	I_{C} [A] I_{D} [A] I_{F} [A]	T_{j} [°C]	Min	Typ	Max	
Dynamic									
Turn-on delay time	$t_{d(on)}$				25 / 125 / 150		28,4 / 27,12 / 26,94		ns
Rise time	t_{r}	$R_{gon} = 1\ \Omega$ $R_{goff} = 1\ \Omega$			25 / 125 / 150		10,93 / 10,48 / 10,34		ns
Turn-off delay time	$t_{d(off)}$				25 / 125 / 150		50,4 / 53,35 / 54,34		ns
Fall time	t_{f}				25 / 125 / 150		11,4 / 11,84 / 12,73		ns
Turn-on energy (per pulse)	E_{on}	Q_{rFWD}=0,663 µC Q_{rFWD}=1,16 µC Q_{rFWD}=1,47 µC			25 / 125 / 150		0,077 / 0,082 / 0,09		mWs
Turn-off energy (per pulse)	E_{off}		-4/15	350	96	25 / 125 / 150		0,344 / 0,339 / 0,356		mWs
Peak recovery current	I_{RRM}				25 / 125 / 150		58,82 / 66,46 / 75,23		A
Reverse recovery time	t_{rr}				25 / 125 / 150		19,64 / 26,68 / 29,45		ns
Recovered charge	Q_{r}	di/dt=8205 A/µs di/dt=9802 A/µs di/dt=9312 A/µs			25 / 125 / 150		0,663 / 1,16 / 1,47		µC
Reverse recovered energy	E_{rec}				25 / 125 / 150		0,165 / 0,339 / 0,427		mWs
Peak rate of fall of recovery current	$(di_{rr}/dt)_{max}$				25 / 125 / 150		7648,08 / 5458,93 / 7119,21		A/µs

06 Feb. 2026 / Revision 1

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Characteristic Values

Parameter	Symbol	Conditions				Values			Unit
		V_{GE} **[V]** V_{GS} **[V]**	V_{CE} **[V]** V_{DS} **[V]** V_{F} **[V]**	I_{C} **[A]** I_{D} **[A]** I_{F} **[A]**	T_{j} **[°C]**	**Min**	**Typ**	**Max**	

Boost Switch

Static

Parameter	Symbol	V_{GE}/V_{GS}	V_{CE}/V_{DS}/V_F	I_C/I_D/I_F	T_j	Min	Typ	Max	Unit
Drain-source on-state resistance[1]	$r_{DS(on)}$	15		114	25 175	6,07	8,67 16,34	11,3	mΩ
Gate-source threshold voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}$		0,0321	25	1,8	2,7	3,6	V
Gate to Source Leakage Current	I_{GSS}	15	0		25		30	750	nA
Zero Gate Voltage Drain Current	I_{DSS}	0	1200		25		3	150	μA
Internal gate resistance	r_g						1,37		Ω
Gate charge	Q_g	-4/15	800	114	25		408		nC
Short-circuit input capacitance	C_{iss}	f = 100 kHz	0	1000	0	25		10410		pF
Short-circuit output capacitance	C_{oss}						330		
Reverse transfer capacitance	C_{rss}						27		
Diode forward voltage	V_{SD}	0		58,5	25		4,8		V

Thermal

Parameter	Symbol	Conditions				Min	Typ	Max	Unit
Thermal resistance junction to sink[2]	$R_{th(j-s)}$	λ_{paste} = 5,2 W/mK (PTM)					0,51		K/W

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Characteristic Values

Parameter	Symbol	Conditions				Values			Unit
		V_{GE} [V] V_{GS} [V]	V_{CE} [V] V_{DS} [V] V_{F} [V]	I_{C} [A] I_{D} [A] I_{F} [A]	T_{j} [°C]	Min	Typ	Max	
Dynamic									
Turn-on delay time	$t_{d(on)}$	$R_{gon} = 1\ \Omega$ $R_{goff} = 1\ \Omega$			25 125 150		26,23 25,34 25,31		ns
Rise time	t_{r}				25 125 150		12,98 12,33 12,4		ns
Turn-off delay time	$t_{d(off)}$				25 125 150		50,95 53,85 54,88		ns
Fall time	t_{f}				25 125 150		10,38 10,01 9,53		ns
Turn-on energy (per pulse)	E_{on}	Q_{rFWD}=0,921 µC Q_{rFWD}=1,26 µC Q_{rFWD}=1,54 µC			25 125 150		0,056 0,043 0,046		mWs
Turn-off energy (per pulse)	E_{off}		-4/15	350	96	25 125 150		0,247 0,248 0,255		mWs
Peak recovery current	I_{RRM}				25 125 150		76,23 86,73 92,73		A
Reverse recovery time	t_{rr}				25 125 150		20,24 24,75 28,04		ns
Recovered charge	Q_{r}	di/dt=7670 A/µs di/dt=6838 A/µs di/dt=7549 A/µs			25 125 150		0,921 1,26 1,54		µC
Reverse recovered energy	E_{rec}				25 125 150		0,301 0,385 0,46		mWs
Peak rate of fall of recovery current	$(di_{rr}/dt)_{max}$				25 125 150		10994,3 9060,27 8132,59		A/µs

06 Feb. 2026 / Revision 1

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Characteristic Values

Parameter	Symbol	Conditions				Values			Unit
		V_{GE} **[V]** V_{GS} **[V]**	V_{CE} **[V]** V_{DS} **[V]** V_{F} **[V]**	I_{C} **[A]** I_{D} **[A]** I_{F} **[A]**	T_{j} **[°C]**	**Min**	**Typ**	**Max**	

Thermistor

Static

Parameter	Symbol	Conditions				Values			Unit
Rated resistance	R				25		5		kΩ
Deviation of R100	$\Delta_{R/R}$	R_{100} = 493 Ω			100	-5		5	%
Power dissipation	P						245		mW
Power dissipation constant	d				25		1,4		mW/K
B-value	$B_{(25/50)}$	Tol. ±2 %					3375		K
B-value	$B_{(25/100)}$	Tol. ±2 %					3437		K
Vincotech Thermistor Reference								K	

[1] Value at chip level

[2] Only valid with pre-applied Vincotech thermal interface material.

Buck Switch Characteristics

figure 1.	MOSFET

Typical output characteristics including $R_{DD'} + R_{SS'}$
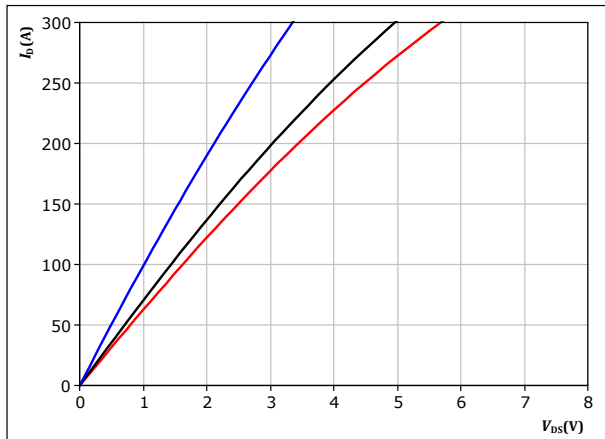
$I_D = f(V_{DS})$

				25 °C
$t_p =$	250	µs		
$V_{GS} =$	15	V	T_j:	125 °C
				150 °C

figure 2.	MOSFET

Typical output characteristics including $R_{DD'} + R_{SS'}$

$I_D = f(V_{DS})$

V_{GS}:
- -4 V
- -2 V
- 0 V
- 1 V
- 3 V
- 5 V
- 7 V
- 9 V
- 11 V
- 13 V
- 15 V

$t_p =$	250	µs
$T_j =$	150	°C
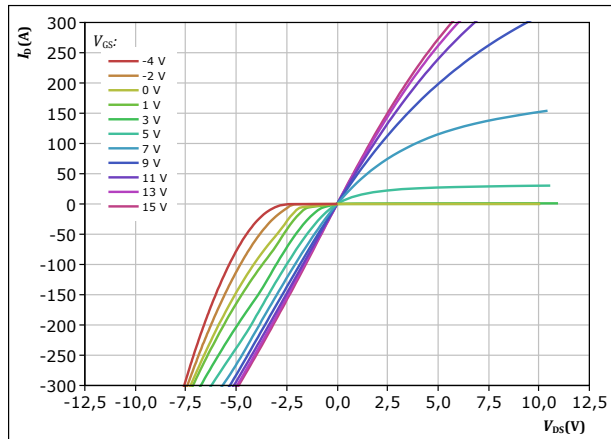
V_{GS} from -4 V to 15 V in steps of 2 V

figure 3.	MOSFET

Typical transfer characteristics

$I_D = f(V_{GS})$
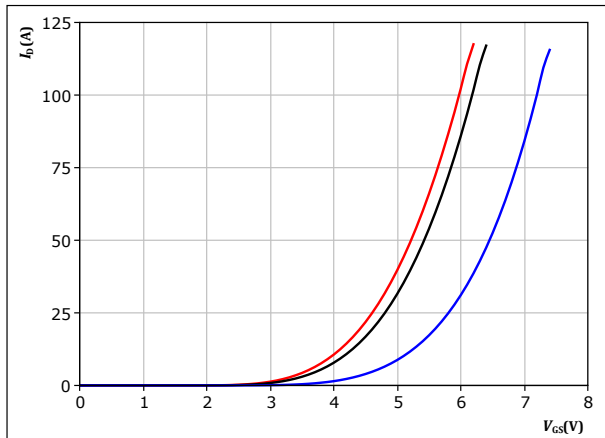
				25 °C
$t_p =$	250	µs		
$V_{DS} =$	20	V	T_j:	125 °C
				150 °C

figure 4.	MOSFET

Typical reverse drain current characteristics including $R_{DD'} + R_{SS'}$
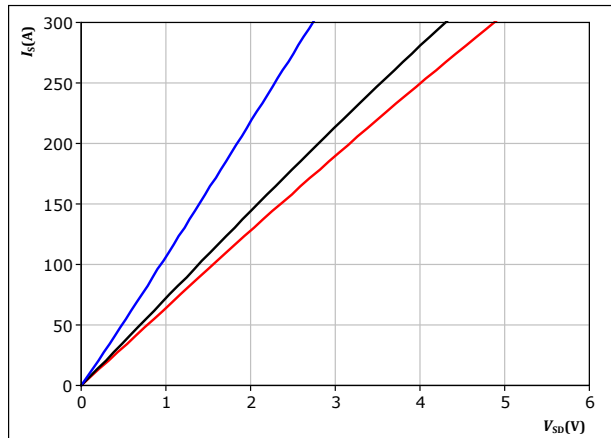
$I_{SD} = f(V_{SD})$

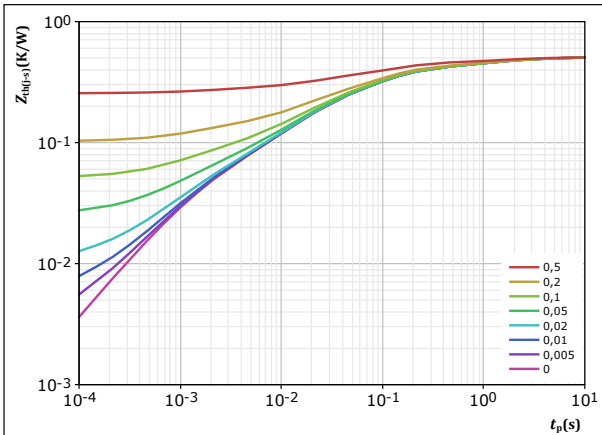|				25 °C
$t_p =$	250	µs		
$V_{GS} =$	15	V	T_j:	125 °C
				150 °C

Buck Switch Characteristics

| figure 5. | MOSFET |

Transient thermal impedance as a function of pulse width
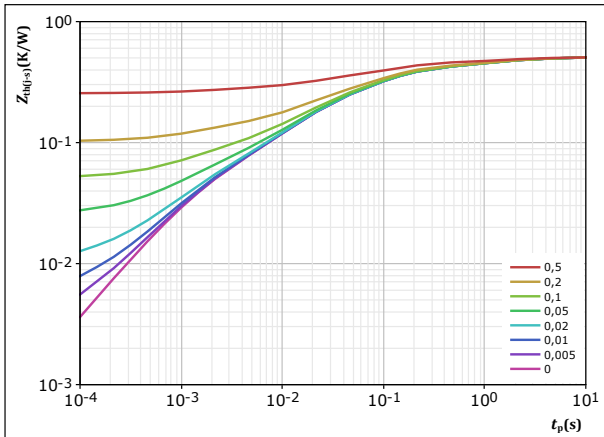
$Z_{th(j-s)} = f(t_p)$

$D =$		t_p / T	
$R_{th(j-s)} =$		0,506	K/W

MOSFET thermal model values

R (K/W)	τ (s)
2,81E-02	6,24E+00
9,23E-02	9,99E-01
2,27E-01	9,34E-02
1,28E-01	1,58E-02
3,53E-02	1,33E-03

| figure 6. | MOSFET |

Safe operating area

$I_D = f(V_{DS})$
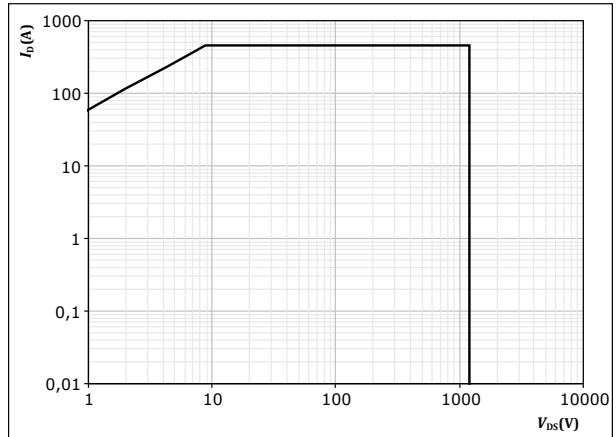
$D =$	single pulse	
$T_s =$	80	°C
$V_{GS} =$	15	V
$T_j =$	T_{jmax}	

| figure 7. | MOSFET |

Gate voltage vs gate charge
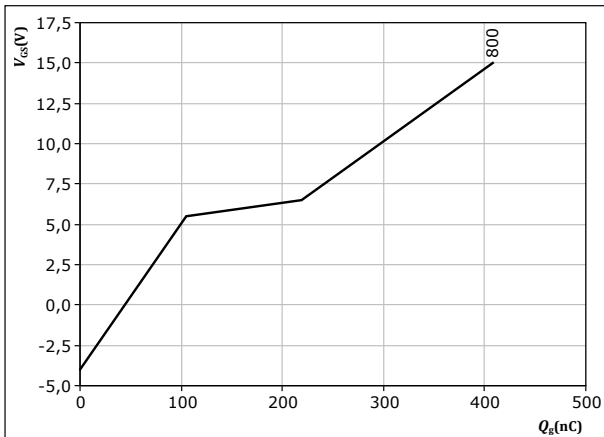
$V_{GS} = f(Q_g)$

$I_D =$	114	A
$T_j =$	25	°C

Boost Switch Characteristics

figure 8. — MOSFET

Typical output characteristics including $R_{DD'} + R_{SS'}$
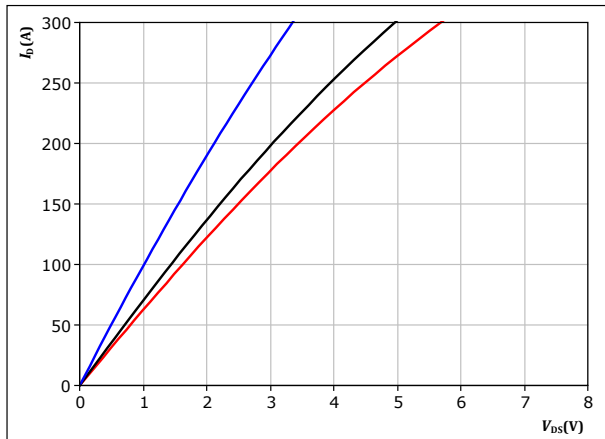
$I_D = f(V_{DS})$

$t_p =$	250	µs		25 °C
$V_{GS} =$	15	V	T_j:	125 °C
				150 °C

figure 9. — MOSFET

Typical output characteristics including $R_{DD'} + R_{SS'}$

$I_D = f(V_{DS})$

V_{GS}:
- -4 V
- -2 V
- 0 V
- 1 V
- 3 V
- 5 V
- 7 V
- 9 V
- 11 V
- 13 V
- 15 V

$t_p =$	250	µs
$T_j =$	150	°C
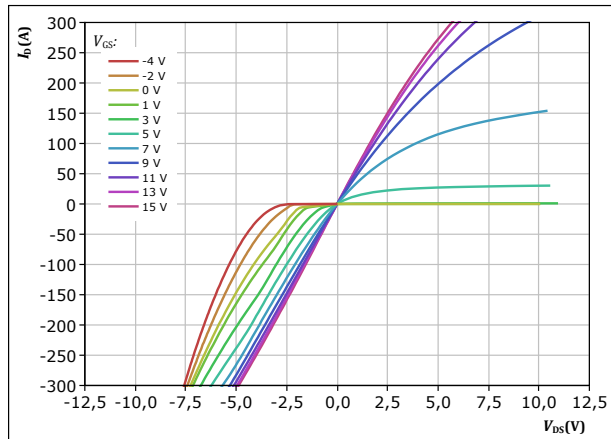
V_{GS} from -4 V to 15 V in steps of 2 V

figure 10. — MOSFET

Typical transfer characteristics

$I_D = f(V_{GS})$
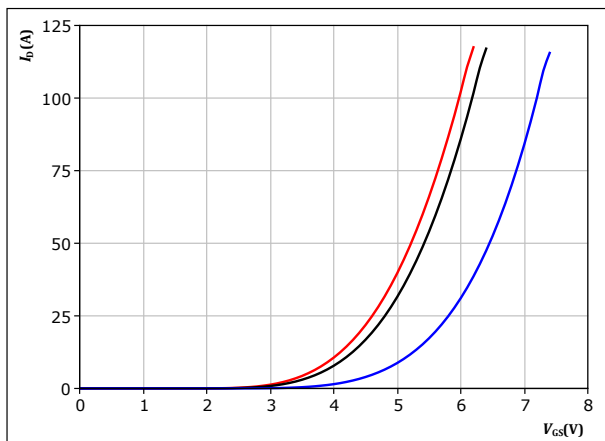
$t_p =$	250	µs		25 °C
$V_{DS} =$	20	V	T_j:	125 °C
				150 °C

figure 11. — MOSFET

Typical reverse drain current characteristics including $R_{DD'} + R_{SS'}$
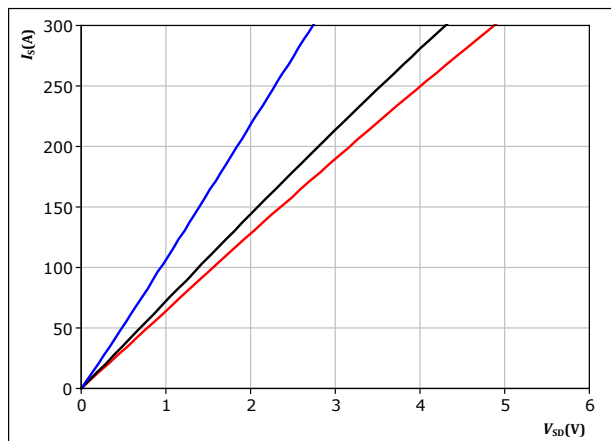
$I_{SD} = f(V_{SD})$

$t_p =$	250	µs		25 °C
$V_{GS} =$	15	V	T_j:	125 °C
				150 °C

06 Feb. 2026 / Revision 1

Boost Switch Characteristics

figure 12.   **MOSFET**

Transient thermal impedance as a function of pulse width

$Z_{th(j-s)} = f(t_p)$

Curve
0,5
0,2
0,1
0,05
0,02
0,01
0,005
0

$D = \quad t_p / T$

$R_{th(j-s)} = \quad 0{,}506 \quad$ K/W

MOSFET thermal model values

R (K/W)	τ (s)
2,81E-02	6,24E+00
9,23E-02	9,99E-01
2,27E-01	9,34E-02
1,28E-01	1,58E-02
3,53E-02	1,33E-03

figure 13.   **MOSFET**

Safe operating area
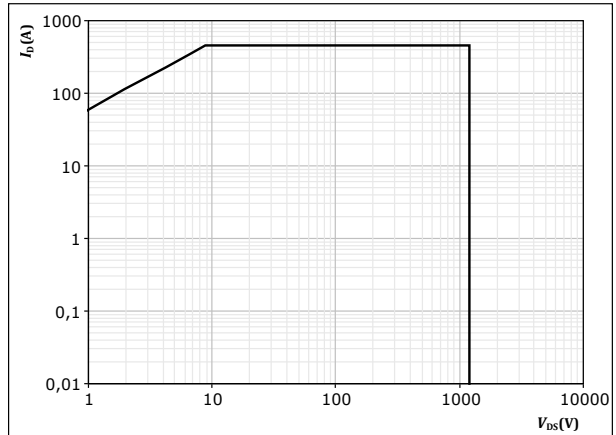
$I_D = f(V_{DS})$

$D =$ single pulse

$T_s = \quad 80 \quad$ °C

$V_{GS} = \quad 15 \quad$ V

$T_j = \quad T_{jmax}$

figure 14.   **MOSFET**

Gate voltage vs gate charge

$V_{GS} = f(Q_g)$

$I_D = \quad 114 \quad$ A

$T_j = \quad 25 \quad$ °C

Thermistor Characteristics

figure 15.	Thermistor

Typical NTC characteristic as function of temperature
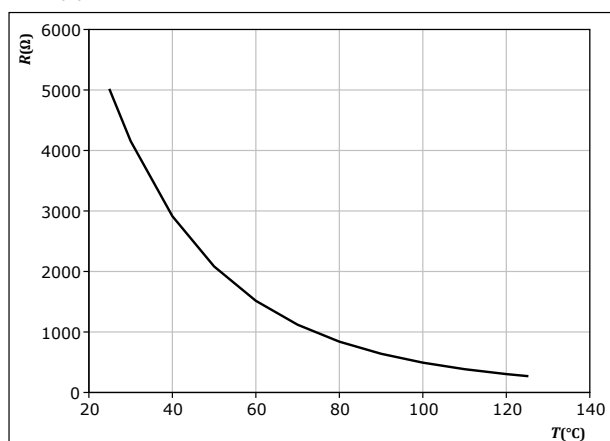
$R_T = f(T)$

Buck Switching Characteristics

figure 16.	MOSFET

Typical switching energy losses as a function of drain current

$E = f(I_D)$

With an inductive load at

				T_j:	25 °C
$V_{DS} =$	350	V			125 °C
$V_{GS} =$	-4/15	V			150 °C
$R_{gon} =$	1	Ω			
$R_{goff} =$	1	Ω			

figure 17.	MOSFET

Typical switching energy losses as a function of MOSFET turn on gate resistor

$E = f(R_g)$
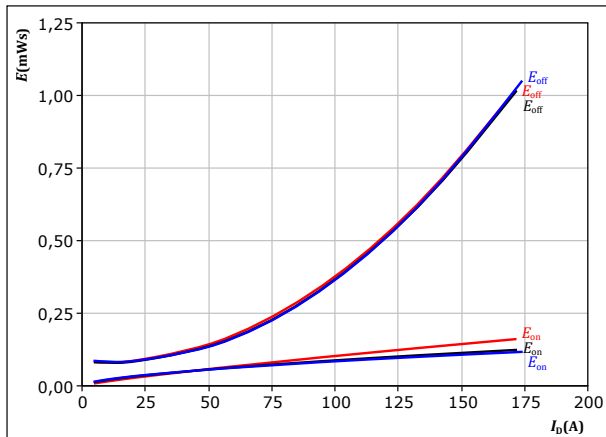
With an inductive load at

				T_j:	25 °C
$V_{DS} =$	350	V			125 °C
$V_{GS} =$	-4/15	V			150 °C
$I_D =$	96	A			

figure 18.	MOSFET

Typical reverse recovered energy loss as a function of drain current

$E_{rec} = f(I_D)$
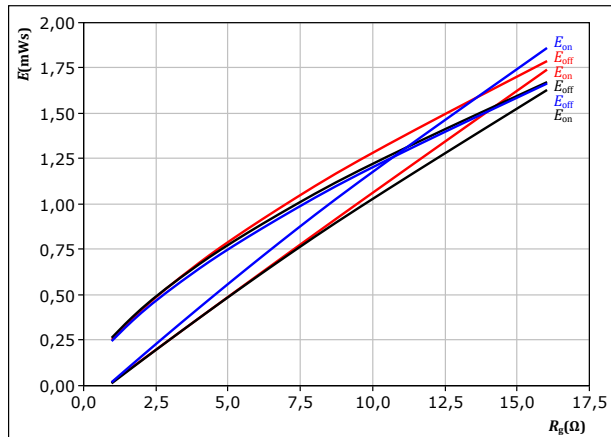
With an inductive load at

				T_j:	25 °C
$V_{DS} =$	350	V			125 °C
$V_{GS} =$	-4/15	V			150 °C
$R_{gon} =$	1	Ω			

figure 19.	MOSFET

Typical reverse recovered energy loss as a function of MOSFET turn on gate resistor

$E_{rec} = f(R_g)$
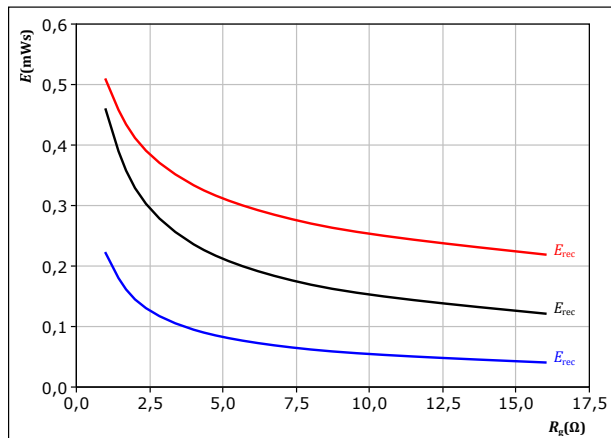
With an inductive load at

				T_j:	25 °C
$V_{DS} =$	350	V			125 °C
$V_{GS} =$	-4/15	V			150 °C
$I_D =$	96	A			

Buck Switching Characteristics

figure 20. MOSFET

Typical switching times as a function of drain current

$t = f(I_D)$
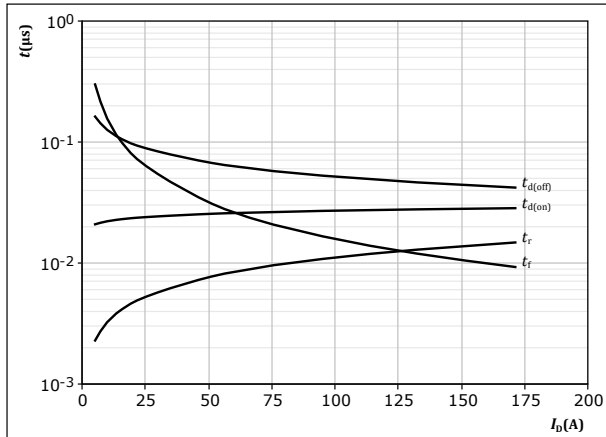
With an inductive load at

T_j =	150	°C
V_{DS} =	350	V
V_{GS} =	-4/15	V
R_{gon} =	1	Ω
R_{goff} =	1	Ω

figure 21. MOSFET

Typical switching times as a function of MOSFET turn on gate resistor

$t = f(R_g)$
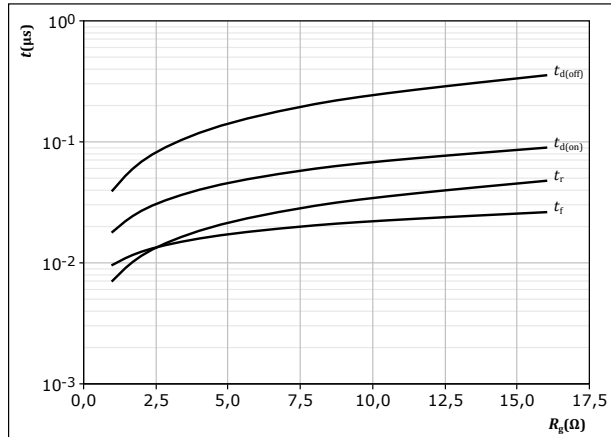
With an inductive load at

T_j =	150	°C
V_{DS} =	350	V
V_{GS} =	-4/15	V
I_D =	96	A

figure 22. MOSFET

Typical reverse recovery time as a function of drain current

$t_{rr} = f(I_D)$
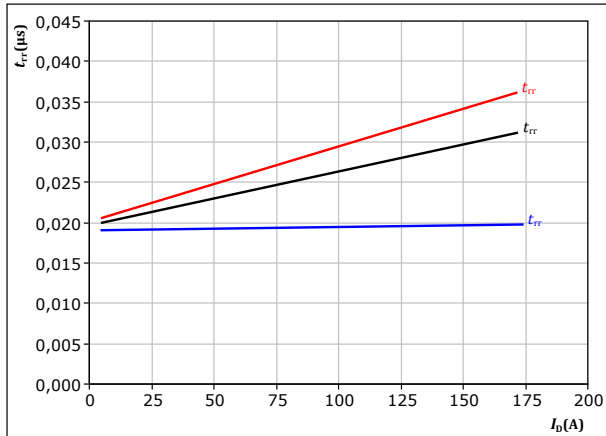
At	V_{DS} =	350	V			25 °C
	V_{GS} =	-4/15	V	T_j:		125 °C
	R_{gon} =	1	Ω			150 °C

figure 23. MOSFET

Typical reverse recovery time as a function of MOSFET turn on gate resistor

$t_{rr} = f(R_{gon})$
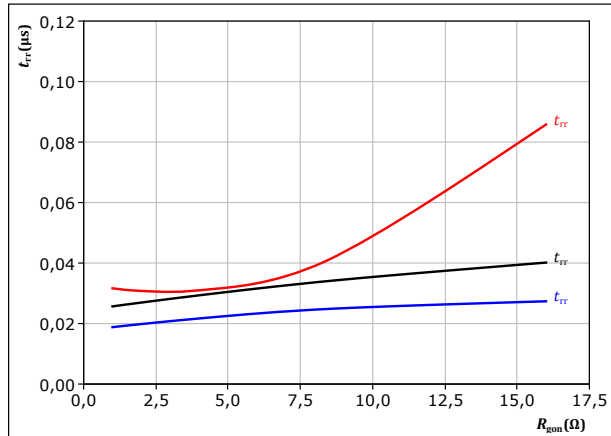
At	V_{DS} =	350	V			25 °C
	V_{GS} =	-4/15	V	T_j:		125 °C
	I_D =	96	A			150 °C

Buck Switching Characteristics

figure 24.	MOSFET

Typical recovered charge as a function of drain current

$Q_r = f(I_D)$

At	$V_{DS} =$	350	V		
	$V_{GS} =$	-4/15	V	T_j:	25 °C
	$R_{gon} =$	1	Ω		125 °C
					150 °C

figure 25.	MOSFET

Typical recovered charge as a function of MOSFET turn on gate resistor

$Q_r = f(R_{gon})$
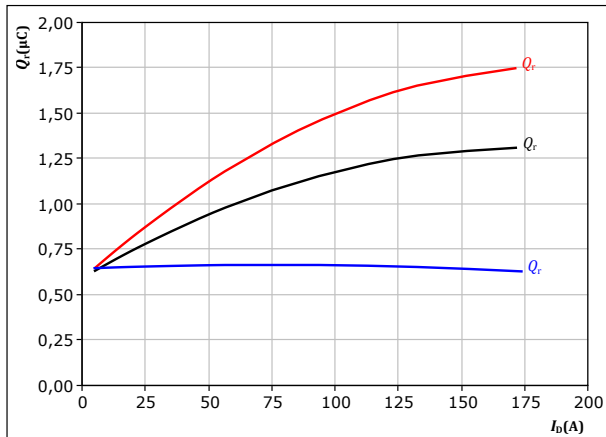
At	$V_{DS} =$	350	V		
	$V_{GS} =$	-4/15	V	T_j:	25 °C
	$I_D =$	96	A		125 °C
					150 °C

figure 26.	MOSFET

Typical peak reverse recovery current as a function of drain current

$I_{RM} = f(I_D)$
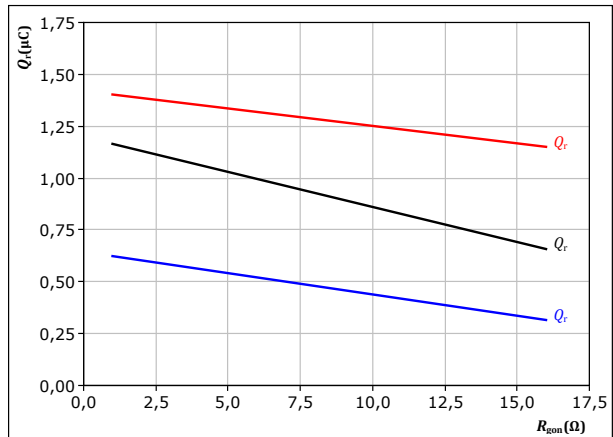
At	$V_{DS} =$	350	V		
	$V_{GS} =$	-4/15	V	T_j:	25 °C
	$R_{gon} =$	1	Ω		125 °C
					150 °C

figure 27.	MOSFET

Typical peak reverse recovery current as a function of MOSFET turn on gate resistor

$I_{RM} = f(R_{gon})$
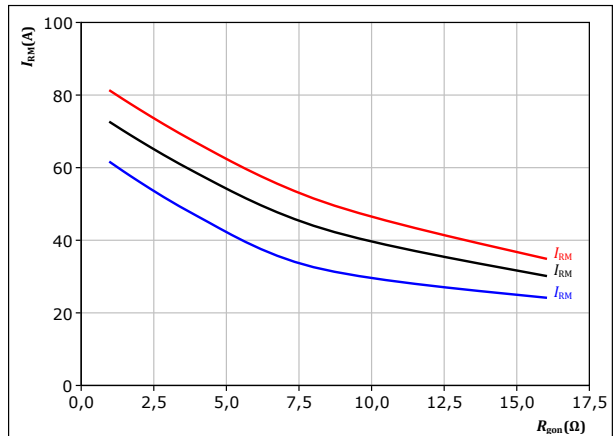
At	$V_{DS} =$	350	V		
	$V_{GS} =$	-4/15	V	T_j:	25 °C
	$I_D =$	96	A		125 °C
					150 °C

Buck Switching Characteristics

figure 28.   **MOSFET**

Typical rate of fall of forward and reverse recovery current as a function of drain current

di_F/dt, $di_{rr}/dt = f(I_D)$
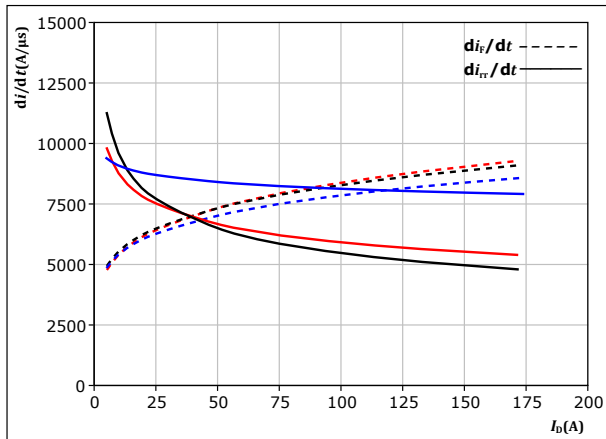
At	$V_{DS} =$	350	V
	$V_{GS} =$	-4/15	V
	$R_{gon} =$	1	Ω

- 25 °C
- T_j: 125 °C
- 150 °C

figure 29.   **MOSFET**

Typical rate of fall of forward and reverse recovery current as a function of turn on gate resistor

di_F/dt, $di_{rr}/dt = f(R_{gon})$
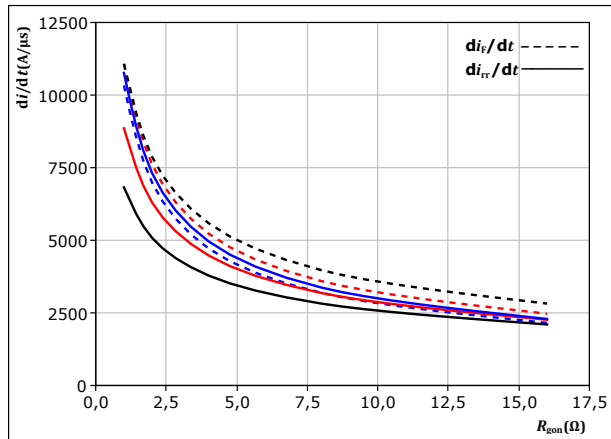
At	$V_{DS} =$	350	V
	$V_{GS} =$	-4/15	V
	$I_D =$	96	A

- 25 °C
- T_j: 125 °C
- 150 °C

figure 30.   **MOSFET**

Reverse bias safe operating area
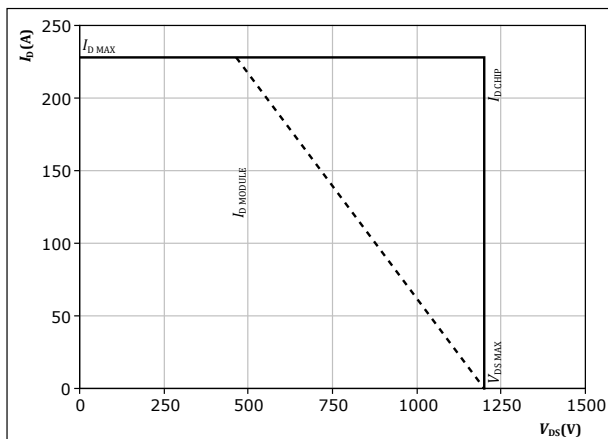
$I_D = f(V_{DS})$

At	$T_j =$	150	°C
	$R_{gon} =$	1	Ω
	$R_{goff} =$	1	Ω

Boost Switching Characteristics

figure 31.   **MOSFET**

Typical switching energy losses as a function of drain current

$E = f(I_D)$
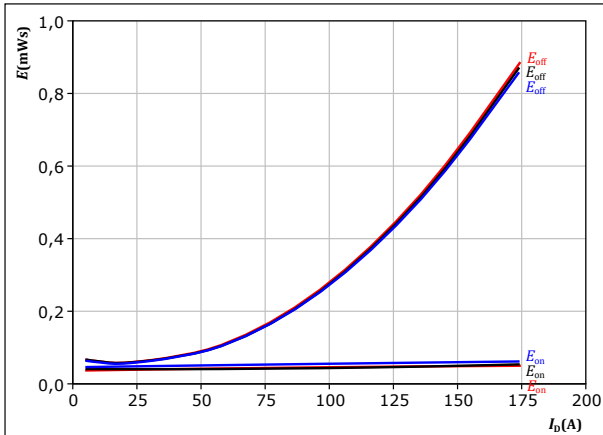
With an inductive load at

			T_j:	25 °C
$V_{DS} =$	350	V		125 °C
$V_{GS} =$	-4/15	V		150 °C
$R_{gon} =$	1	Ω		
$R_{goff} =$	1	Ω		

figure 32.   **MOSFET**

Typical switching energy losses as a function of MOSFET turn on gate resistor

$E = f(R_g)$
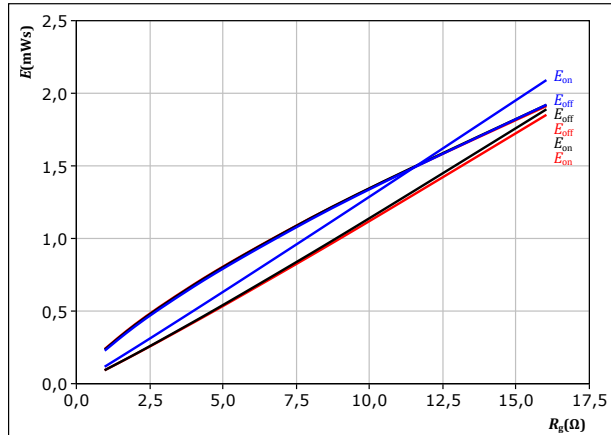
With an inductive load at

			T_j:	25 °C
$V_{DS} =$	350	V		125 °C
$V_{GS} =$	-4/15	V		150 °C
$I_D =$	96	A		

figure 33.   **MOSFET**

Typical reverse recovered energy loss as a function of drain current

$E_{rec} = f(I_D)$
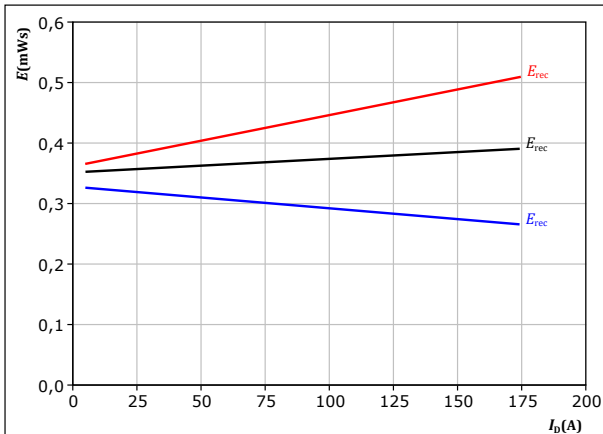
With an inductive load at

			T_j:	25 °C
$V_{DS} =$	350	V		125 °C
$V_{GS} =$	-4/15	V		150 °C
$R_{gon} =$	1	Ω		

figure 34.   **MOSFET**

Typical reverse recovered energy loss as a function of MOSFET turn on gate resistor

$E_{rec} = f(R_g)$
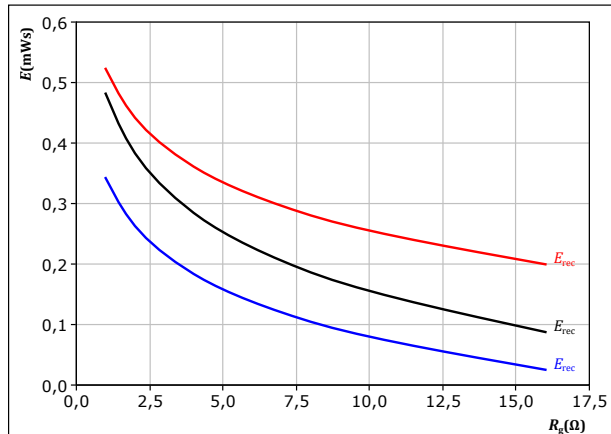
With an inductive load at

			T_j:	25 °C
$V_{DS} =$	350	V		125 °C
$V_{GS} =$	-4/15	V		150 °C
$I_D =$	96	A		

Boost Switching Characteristics

figure 35.   MOSFET

Typical switching times as a function of drain current

$t = f(I_D)$
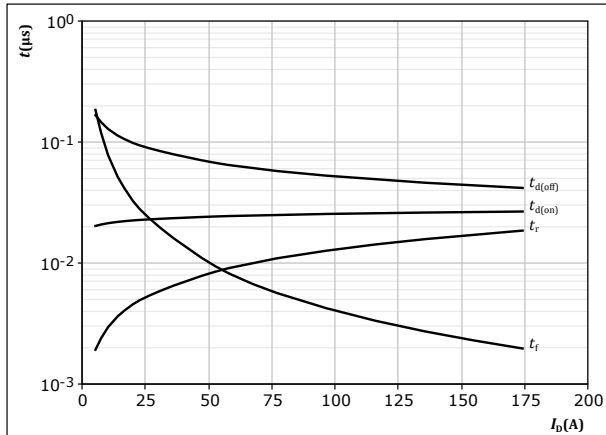
With an inductive load at

T_j =	150	°C
V_{DS} =	350	V
V_{GS} =	-4/15	V
R_{gon} =	1	Ω
R_{goff} =	1	Ω

figure 36.   MOSFET

Typical switching times as a function of MOSFET turn on gate resistor

$t = f(R_g)$
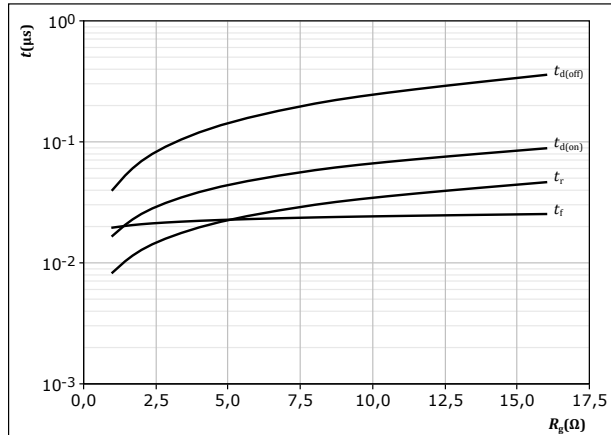
With an inductive load at

T_j =	150	°C
V_{DS} =	350	V
V_{GS} =	-4/15	V
I_D =	96	A

figure 37.   MOSFET

Typical reverse recovery time as a function of drain current

$t_{rr} = f(I_D)$
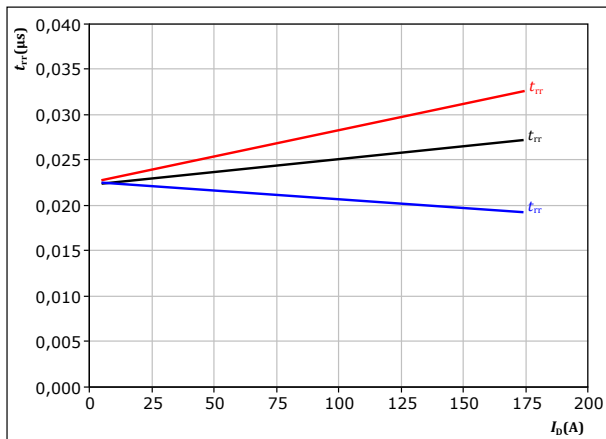
At	V_{DS} =	350	V			
	V_{GS} =	-4/15	V			25 °C
	R_{gon} =	1	Ω	T_j:		125 °C
						150 °C

figure 38.   MOSFET

Typical reverse recovery time as a function of MOSFET turn on gate resistor

$t_{rr} = f(R_{gon})$
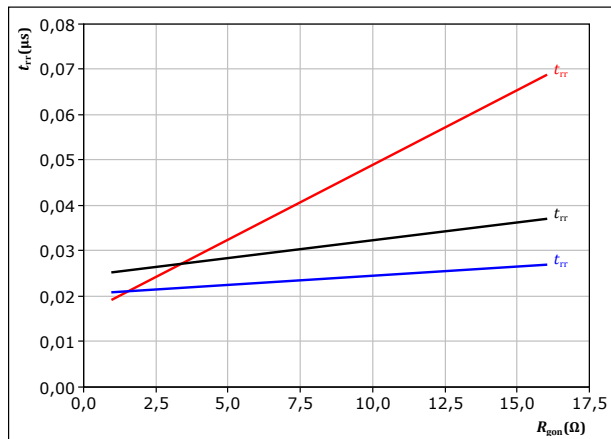
At	V_{DS} =	350	V			
	V_{GS} =	-4/15	V			25 °C
	I_D =	96	A	T_j:		125 °C
						150 °C

Boost Switching Characteristics

figure 39. **MOSFET**

Typical recovered charge as a function of drain current

$Q_r = f(I_D)$
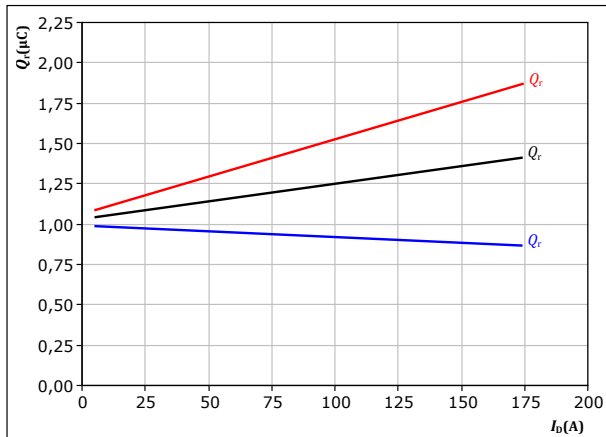
At	$V_{DS} =$	350	V			25 °C
	$V_{GS} =$	-4/15	V	T_j:		125 °C
	$R_{gon} =$	1	Ω			150 °C

figure 40. **MOSFET**

Typical recovered charge as a function of MOSFET turn on gate resistor

$Q_r = f(R_{gon})$
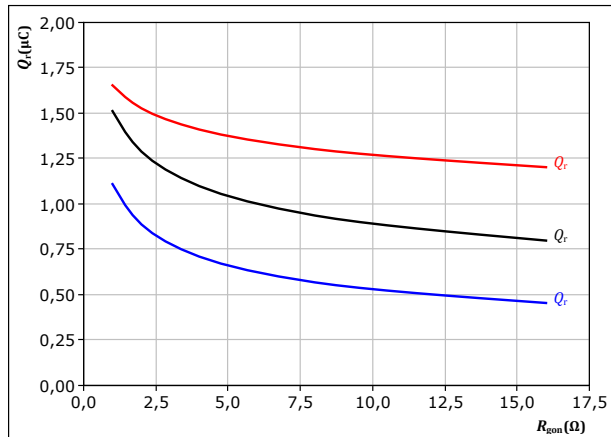
At	$V_{DS} =$	350	V			25 °C
	$V_{GS} =$	-4/15	V	T_j:		125 °C
	$I_D =$	96	A			150 °C

figure 41. **MOSFET**

Typical peak reverse recovery current as a function of drain current

$I_{RM} = f(I_D)$
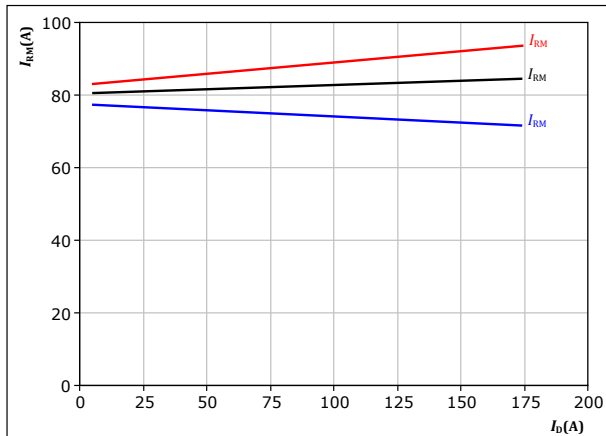
At	$V_{DS} =$	350	V			25 °C
	$V_{GS} =$	-4/15	V	T_j:		125 °C
	$R_{gon} =$	1	Ω			150 °C

figure 42. **MOSFET**

Typical peak reverse recovery current as a function of MOSFET turn on gate resistor

$I_{RM} = f(R_{gon})$

At	$V_{DS} =$	350	V			25 °C
	$V_{GS} =$	-4/15	V	T_j:		125 °C
	$I_D =$	96	A			150 °C

06 Feb. 2026 / Revision 1
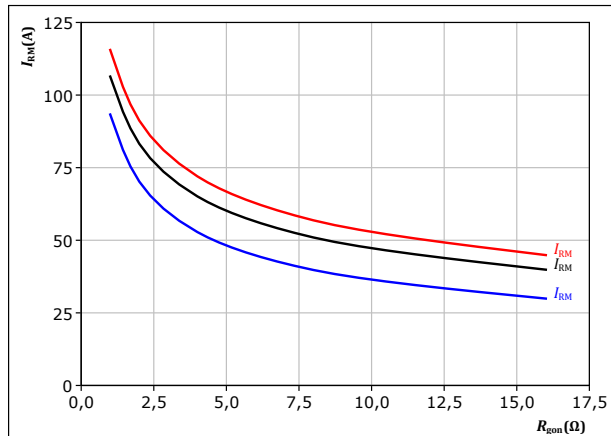
Boost Switching Characteristics

figure 43. MOSFET

Typical rate of fall of forward and reverse recovery current as a function of drain current
di_F/dt, di_{rr}/dt = f(I_D)
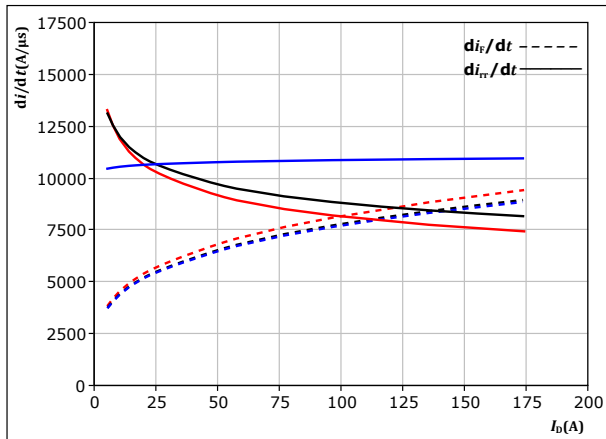
At	V_{DS} =	350	V
	V_{GS} =	-4/15	V
	R_{gon} =	1	Ω

figure 44. MOSFET

Typical rate of fall of forward and reverse recovery current as a function of turn on gate resistor
di_F/dt, di_{rr}/dt = f(R_{gon})
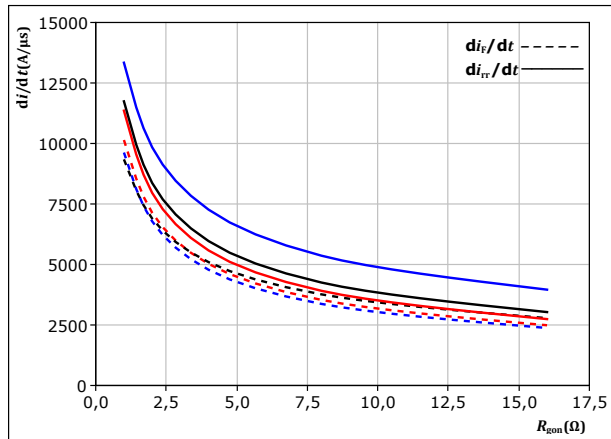
At	V_{DS} =	350	V
	V_{GS} =	-4/15	V
	I_D =	96	A

figure 45. MOSFET

Reverse bias safe operating area
I_D = f(V_{DS})
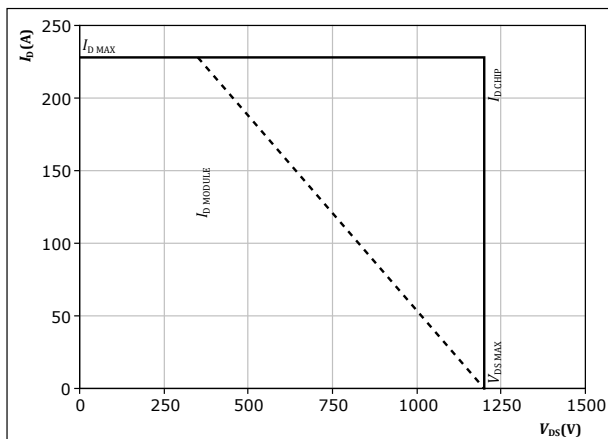
At	T_j =	150	°C
	R_{gon} =	1	Ω
	R_{goff} =	1	Ω

Switching Definitions

figure 46. **MOSFET**

Turn-off Switching Waveforms & definition of t_{doff}, t_{Eoff} (t_{Eoff} = integrating time for E_{off})
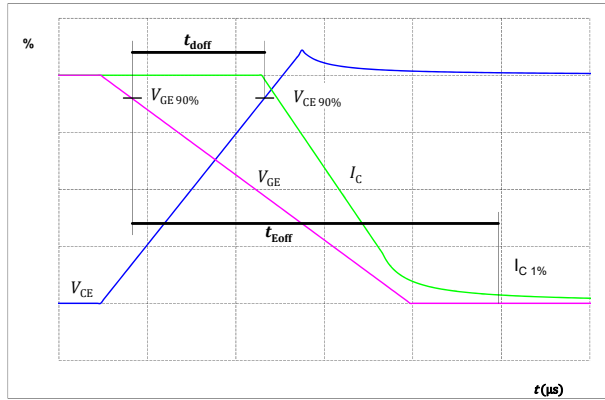
figure 47. **MOSFET**

Turn-on Switching Waveforms & definition of t_{don}, t_{Eon} (t_{Eon} = integrating time for E_{on})
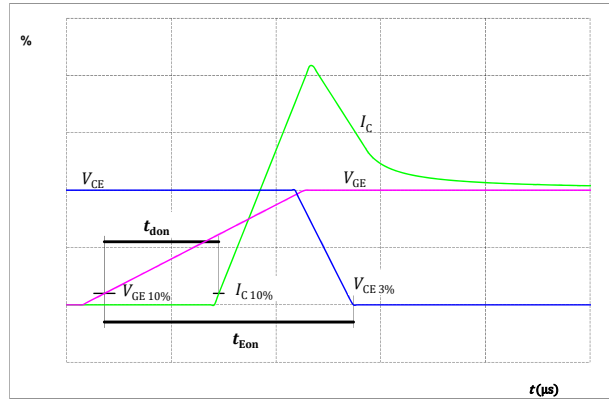
figure 48. **MOSFET**

Turn-off Switching Waveforms & definition of t_f
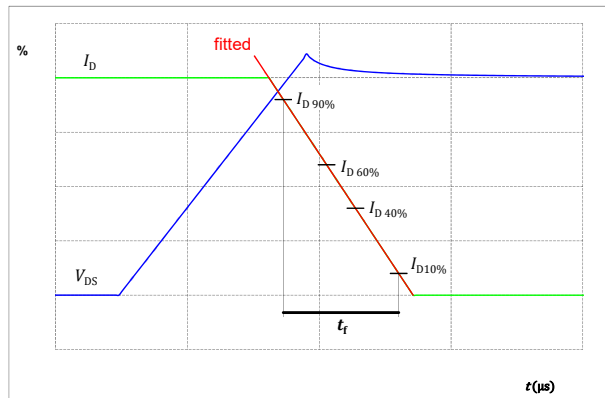
figure 49. **MOSFET**

Turn-on Switching Waveforms & definition of t_r
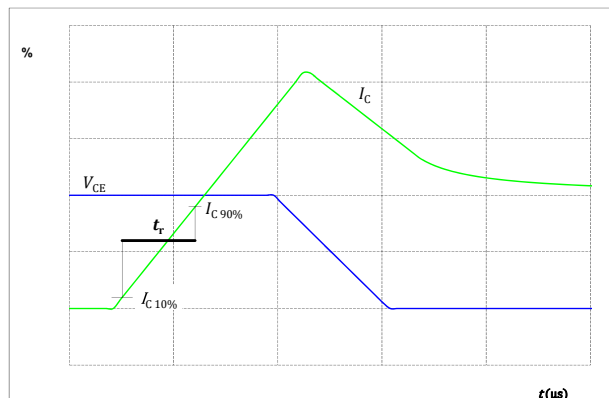
Switching Definitions

figure 50. **FWD**

Turn-off Switching Waveforms & definition of t_{trr}
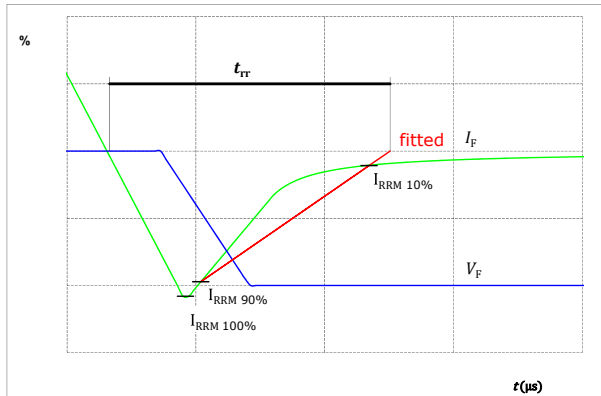
figure 51. **FWD**

Turn-on Switching Waveforms & definition of t_{Qrr} (t_{Qrr} = integrating time for Q_{rr})
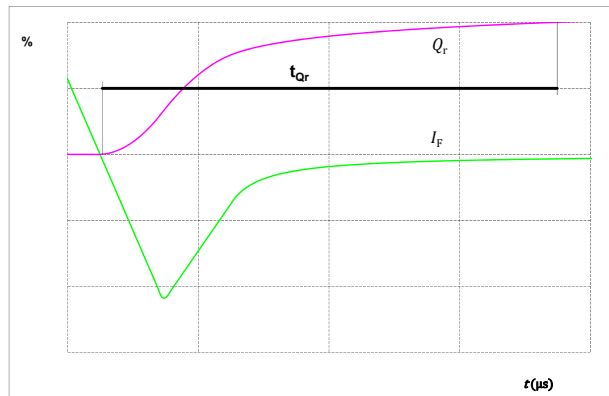
figure 52. **FWD**

Turn-on Switching Waveforms & definition of t_{Erec} (t_{Erec} = integrating time for E_{rec})
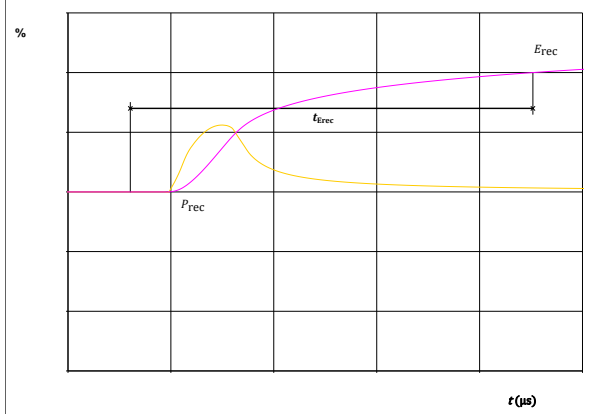
Ordering Code

Version	Ordering Code
Without thermal paste	10-EY12NMA009ME30-LS28F14T
With thermal paste (5,2 W/mK, PTM6000HV)	10-EY12NMA009ME30-LS28F14T-/7/

Marking

		Name	Date code	UL & VIN	Lot	Serial
	Text	NN-NNNNNNNNNNNNNN-TTTTTTVV	WWYY	UL VIN	LLLLL	SSSS
		Type&Ver	Lot number	Serial	Date code	
	Datamatrix	TTTTTTVV	LLLLL	SSSS	WWYY	

Outline

Pin table [mm]

Pin	X	Y	Function
1	32	3,2	S11
2	32	0	G11
3	3,2	0	DC+
4	0	0	DC+
5	3,2	3,2	DC+
6	0	3,2	DC+
7	3,2	12,8	GND
8	0	12,8	GND
9	3,2	16	GND
10	0	16	GND
11	0	28,8	S14
12	0	32	G14
13	0	38,4	DC-
14	0	41,6	DC-
15	0	44,8	DC-
16	0	48	DC-
17	19,2	48	S12
18	22,4	48	G12
19	32	48	Therm1
20	32	44,8	Therm2
21	32	38,4	Ph
22	32	35,2	Ph
23	32	32	Ph
24	32	19,2	Ph
25	32	16	Ph
26	32	12,8	Ph
27	16	19,2	S13
28	12,8	19,2	G13
29	16	28,8	CC

center of press-fit pin head
pin head type "T", PCB plated through-hole Φ1mm +0,09 / -0,06
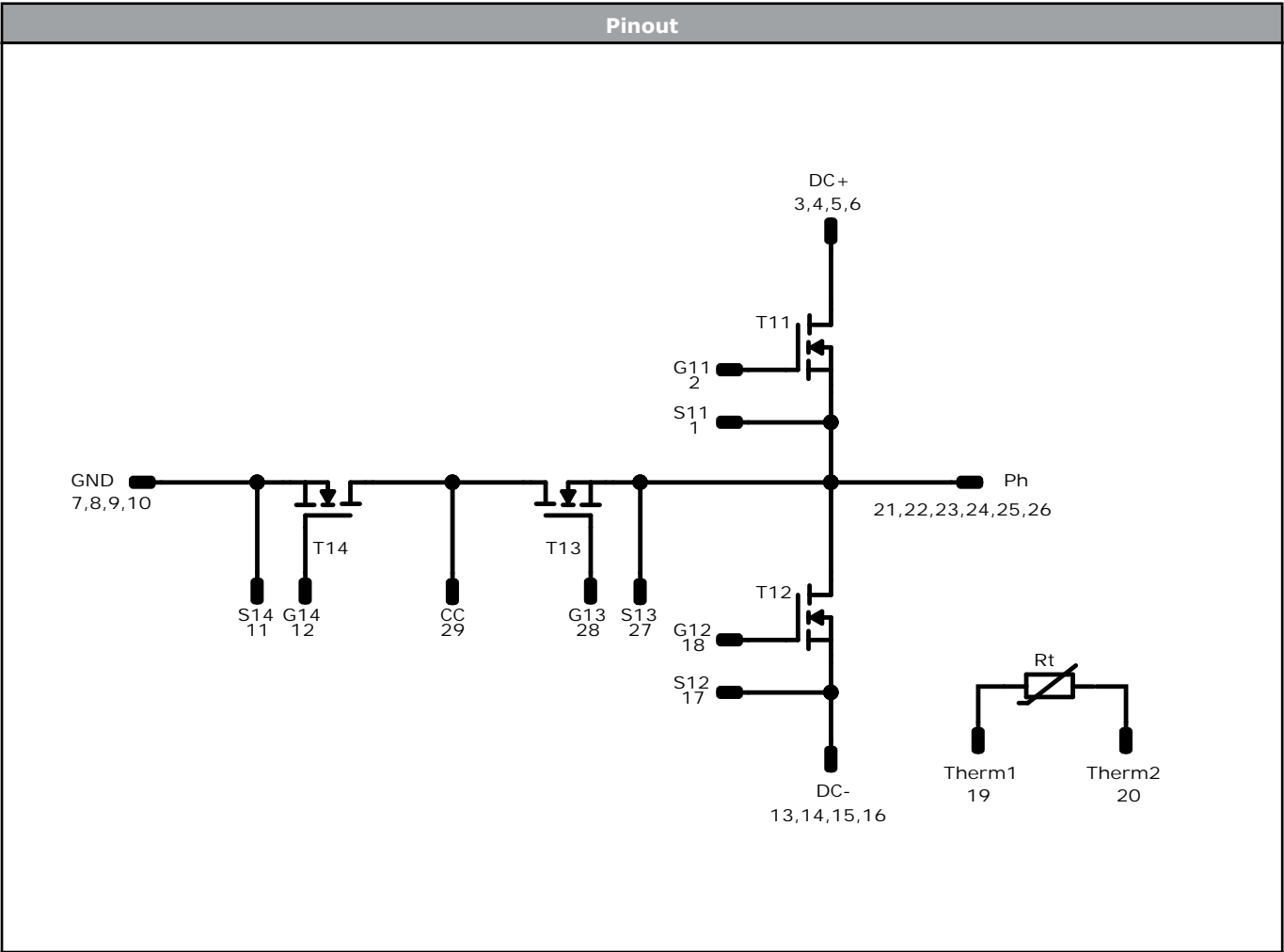for further PCB design rules refer to the latest handling instruction

Tolerance of pinpositions ±0,4mm at the end of pins
Dimension of coordinate axis is only offset without tolerance

Pinout

Identification

ID	Component	Voltage	Current	Function	Comment
T11, T12	MOSFET	1200 V	8,67 mΩ	Buck Switch	
T13, T14	MOSFET	1200 V	8,67 mΩ	Boost Switch	
Rt	Thermistor			Thermistor	

Vincotech

Packaging instruction				
Standard packaging quantity (SPQ) 100	>SPQ	Standard	<SPQ	Sample

Handling instruction
Handling instructions for *flow* E2 packages see vincotech.com website.

Package data
Package data for *flow* E2 packages see vincotech.com website.

Vincotech thermistor reference
See Vincotech thermistor reference table at vincotech.com website.

UL recognition and file number	
This device is UL 1557 recognized under E192116 up to a junction temperature under switching condition $T_{j,op}$=175°C and up to 3500VAC/1min isolation voltage. For more information see vincotech.com website.	UL

Document No.:	**Date:**	**Modification:**	**Pages**
10-EY12NMA009ME30-LS28F14T-D1-14	6 Feb. 2026	Initial release	