Vincotech

10-FZ06NBA030SA-P914L33

preliminary datasheet

*flow*BOOST 0	DC Boost Application	600 V/30 A

General conditions

BOOST		
V_{GEon}	=	15 V
V_{GEoff}	=	15 V
R_{gon}	=	16 Ω
R_{goff}	=	16 Ω

Figure 1.   INPUT BOOST IGBT

Typical average static loss as a function of input current Ii_{RMS}

$P_{loss}=f(I_{in})$

Conditions: T_j=   150   °C

Ratio of input DC voltage to output DC voltage

parameter: V_{in}/V_{out} from   0,2   to   1,0

      in   0,2   steps

Figure 2.   INPUT BOOST FWD

Typical average static loss as a function of input current Ii_{RMS}
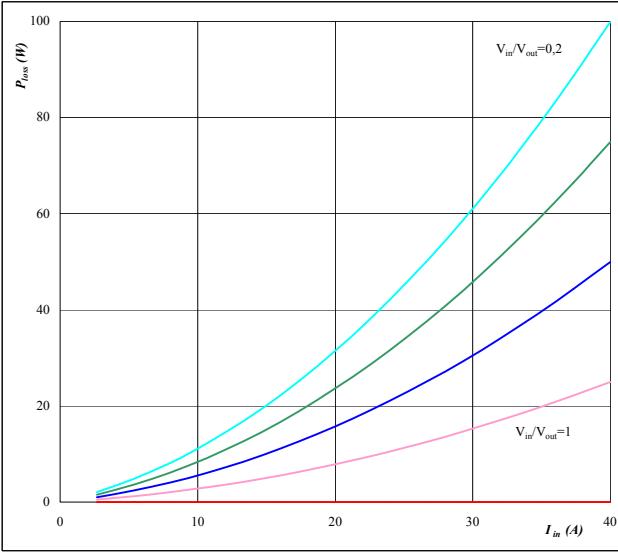
$P_{loss}=f(I_{in})$


Conditions: T_j=   150   °C

Ratio of input DC voltage to output DC voltage

parameter: V_{in}/V_{out} from   0,2   to   1,0

      in   0,2   steps

Figure 3.   INPUT BOOST IGBT

Typical average switching loss as a function of input current
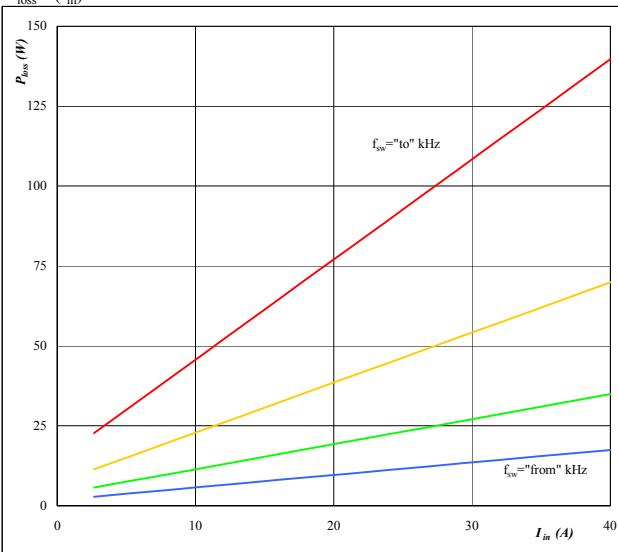
$P_{loss}=f(I_{in})$

Conditions: Tj=   150   °C

      V_{out} =   350   V

Sw. freq.   fsw from   8   kHz to   64   kHz

      in steps of factor 2
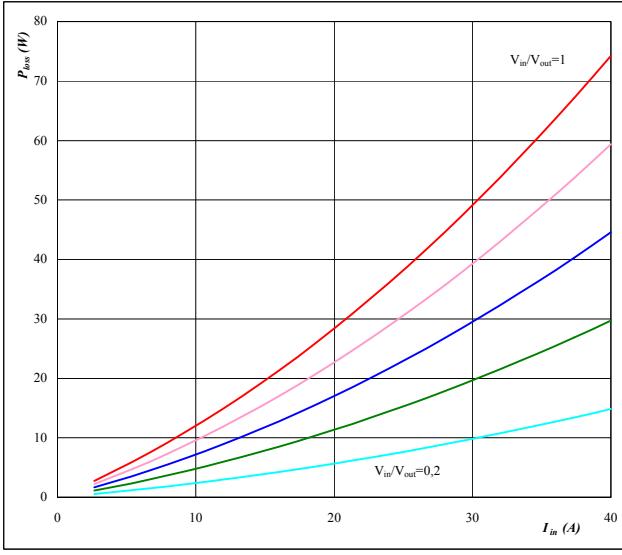
Figure 4.   INPUT BOOST FWD

Typical average switching loss as a function of input current

$P_{loss}=f(I_{in})$

Conditions: Tj=   150   °C

      V_{out} =   350   V

Sw. freq.   fsw from   8   kHz to   64   kHz

      in steps of factor 2

Revision: 2

Figure 5.   per PHASE

**Typical available input current as a function of**
V_{in}/V_{out}

$I_{in}=f(V_{in}/V_{out})$
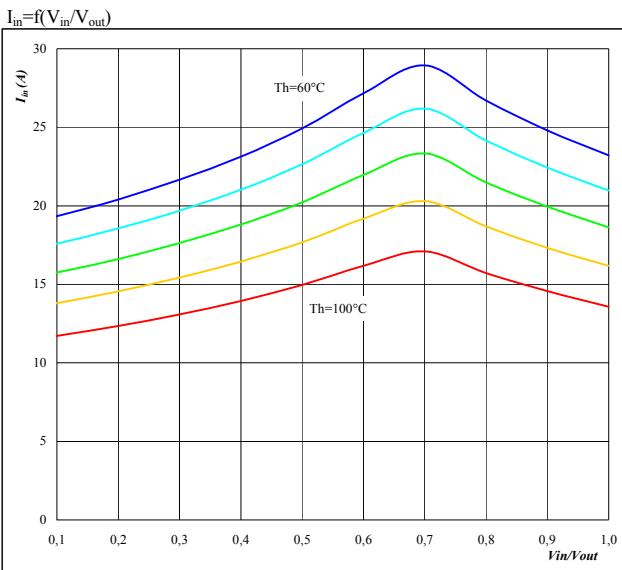
Conditions: $T_j=$ T_{jmax}-25°C

DC link=	350	V		$f_{sw}=$	20	kHz
parameter:	Heatsink temp.					
	Th from	60	°C to	100	°C	
	in	10	°C	steps		

Figure 6.   per PHASE

Typical available input current as a function of
**switching frequency**

$I_{in}=f(f_{sw})$
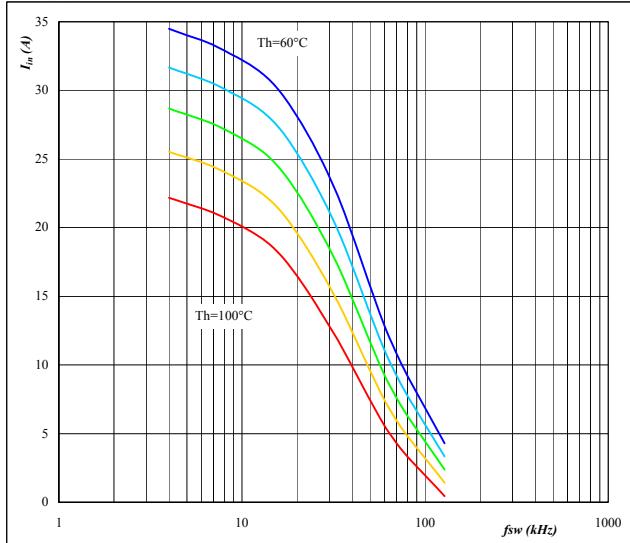
Conditions: $T_j=$ T_{jmax}-25°C

DC link=	350	V		Vin	250	V
parameter:	Heatsink temp.					
	Th from	60	°C to	100	°C	
	in	10	°C	steps		

Figure 7.   per PHASE

Typical available input current as a function of
**f_{sw} and V_{in}/V_{out}**

$I_{in}=f(f_{sw},V_{in}/V_{out})$
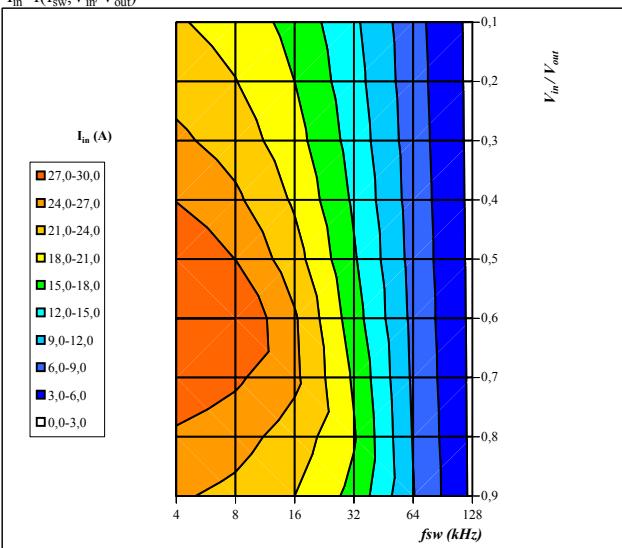
Conditions: Tj= T_{jmax}-25°C

	DC link=	350 V
	Th=	80 °C

Figure 8.   per PHASE

Typical available electric input power as a function
**of heatsink temperature**

$P_{in}=f(T_h)$
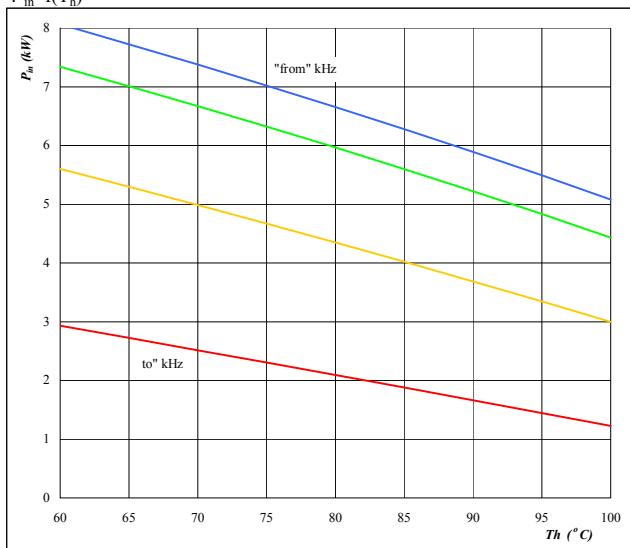
Conditions: Tj= T_{jmax}-25°C

	Vin	250	V	DC link=		350 V	
Sw. freq.	fsw from	8	kHz to	64	kHz		

flowBOOST 0 | **DC Boost Application** | **600 V/30 A**

Figure 9. per PHASE

Typical efficiency as a function of input power

η=f(Pin)
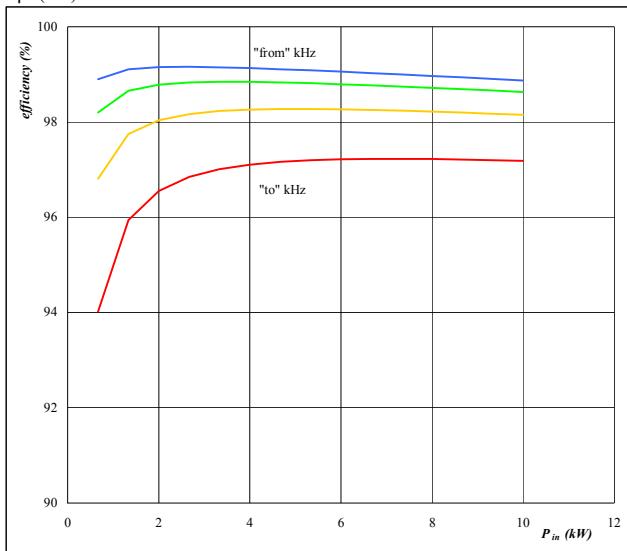
Conditions: Tj= T_{jmax}-25°C

Vin	250 V	DC link=	350 V

parameter:

Sw. freq. fsw from 8 kHz to 64 kHz