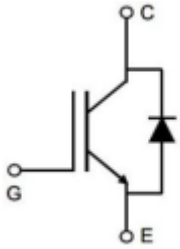
TO-247

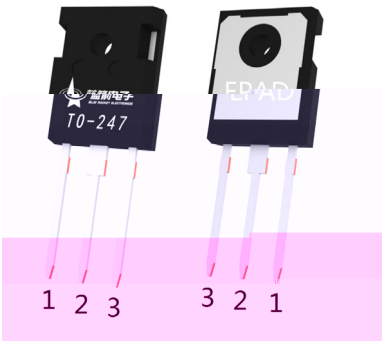
Insulated-Gate Bipolar Transistor in a TO-247 Plastic Package.

650V 75A

$V_{CE(SAT)}$= 1.90V(typ.) @V_{GE}=15V,I_C= 75A

Solar Converters, Uninterrupted Power Supply, Welding Converters, Mid to High Range Switching Frequency Converters.





PIN1 G PIN 2 EPAD C PIN 3 E

See Marking Instructions.

Parameter		Symbol	Rating	Unit
Collector-Emitter Voltage		V_{CES}	650	V
Gate-Emitter Voltage		V_{GES}	f 30	V
Continuous Collector Current	T_C=25	I_C	150	A
	T_C=100		75	A
Pulsed Collector Current , Limited by T_{Jmax}		I_{CM}	300	A
Continuous Diode Forward Current	T_C=25	I_F	160	A
	T_C=100		80	A
Power Dissipation	T_C=25	P_D	750	W
	T_C=100		375	W
Operating Junction Temperature Range		T_J	-40 to +175	
Storage Temperature Range		T_{STG}	-55 to +150	
Maximum Junction-to-Ambient		R_{JA}	80	/W
Maximum IGBT Junction-to-Case		R_{JC}	0.20	/W
Maximum Diode Junction-to-Case		R_{JC}	0.55	/W

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage	BV_{CES}	I_C=250uA, V_{GE}=0V		650			V
Zero Gate Voltage Collector current	I_{CES}	V_{CE}=650V, V_{GE}=0V				250	uA
Gate-Emitter Leakage Current	I_{GES}	V_{CE}=0V, V_{GE}= ±30V				f 100	nA
Gate-Emitter Threshold Voltage	$V_{GE(th)}$	V_{CE}=V_{GE}, I_C=250 A		4.0	5.0	5.5	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	V_{GE}=15V, I_C=75A	T_J=25		1.90	2.20	V
			T_J=125		2.00		
Total Gate Charge	Q_g	V_{GE}=15V, I_C=75A	V_{CE}=480V		200		nC
Gate to Emitter Charge	Q_{ge}				20		
Gate to Collector Charge	Q_{gc}				32		

BRGB75P65AHA
Rev.A Jan.-2026

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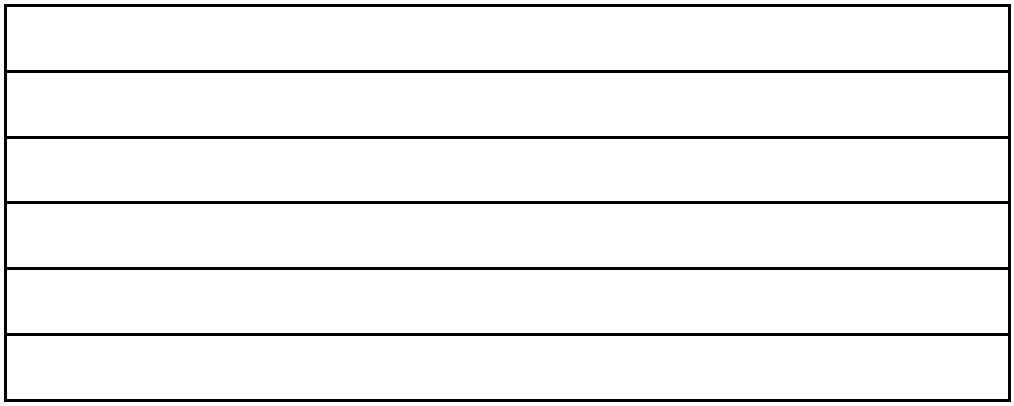
Note:

BR:	Company Code
GB75P65AHA:	Product Type Code
****:	Lot No. Code, code change with Lot No

G PD t … • Ž ¢ (x /) / Temperature Profile for Dip Soldering(Pb-Free)



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1o• Ä ½ “ † 25 ½150 - k ž • 60 ½90sec;

2o• Q › “ † 255 r5 - k ž • 4 Ò 5 r0.5sec;

3o•D N ò i Ò 0 , † 2 ½10 - /sec.

Note:

1.Preheating:25~150 - , Time:60~90sec.

2.Peak Temp.:255 r5 - , Duration:5 r0.5sec.

3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »] / Resistance to Soldering Heat Test Conditions

“ † y 270 r5 -	ž • y 10 r1 sec.	Temp.:270±5	Time:10±1 sec

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