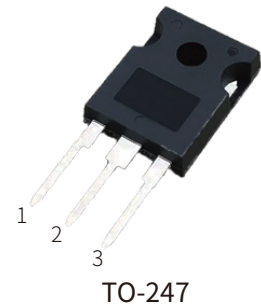
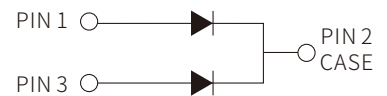


FEATURES

- | Multilayer Metal -Silicon Potential Structure
- | Low Power Loss, High Efficiency
- | High Surge Capacity and High Current Capability
- | High Junction Temperature Capability
- | Meet AEC-Q101 Requirements



APPROVALS



Schematic Symbol

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS (T_A=25°C)

Parameter	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	200	V
Maximum RMS Voltage	V _{RMS}	140	V
Maximum DC Blocking Voltage	V _{R(DC)}	200	V
Average Forward Current T _c =125°C	I _{F(AV)}	30	A
Peak Forward Surge Current 8.3ms,Half Sine Wave	I _{FSM}	275	A
Instantaneous Forward Voltage	V _F	I _{FM} =15A,T _J =25°C	0.90
		I _{FM} =15A,T _J =125°C	0.80
Maximum Reverse Current at Rated DC Blocking Voltage	I _R	T _J =25°C	0.01
		T _J =125°C	1.5
Thermal Resistance- Junction to Case	R _{θJC}	0.5	°C/W
Operating Junction Temperature Range	T _J	-55 to 175	°C
Storage Temperature Range	T _{STG}	-55 to 175	°C

CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

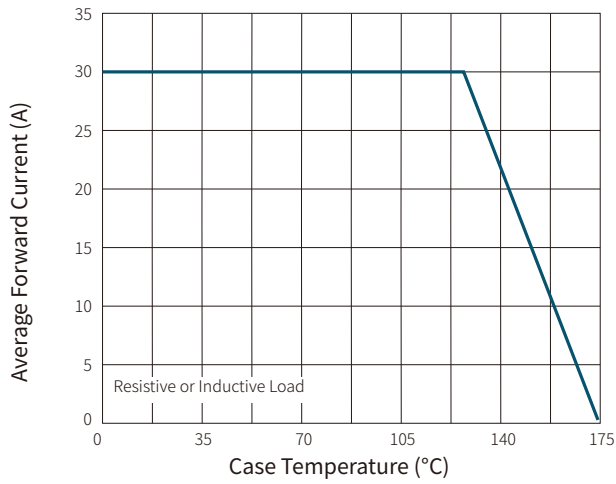


Fig.2 Typical Instantaneous Forward Characteristics

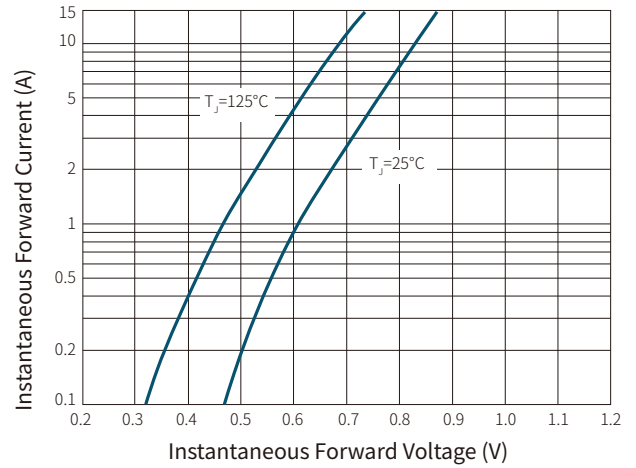
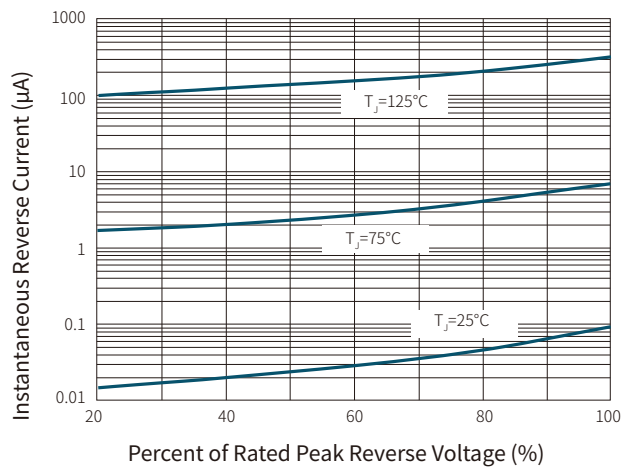
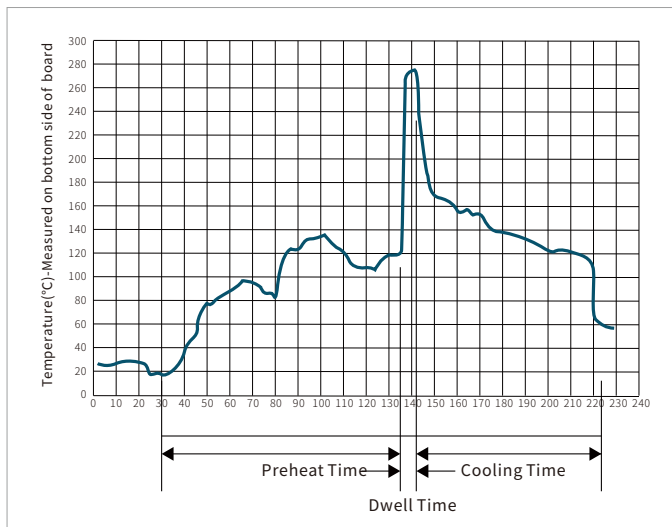


Fig.3 Typical Reverse Leakage Characteristics

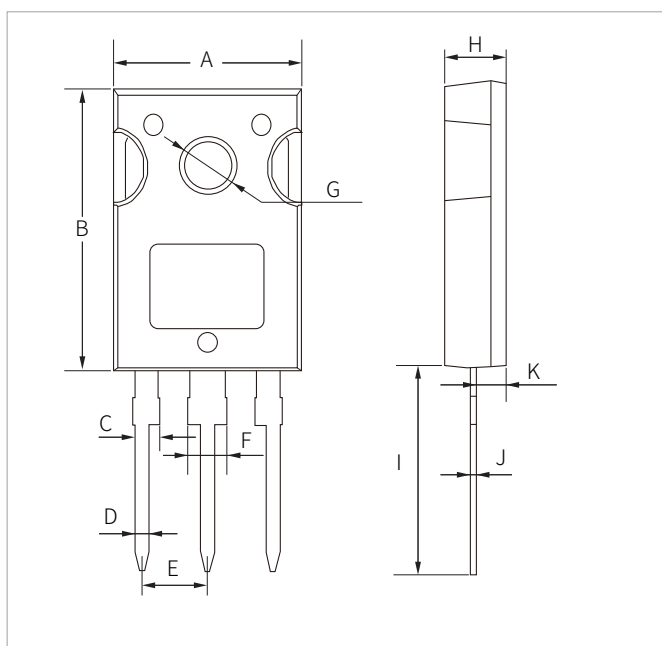


WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

TO-247 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	15.4	15.8	0.606	0.662
B	19.5	20.5	0.767	0.807
C	1.8	2.2	0.070	0.087
D	1.15	1.25	0.045	0.050
E	5.2	5.7	0.204	0.225
F	2.8	3.2	0.110	0.126
G	3.4	3.8	0.133	0.149
H	4.8	5.0	0.188	0.204
I	14.0	14.5	0.550	0.570
J	0.4	0.7	0.015	0.029
K	2.4		0.095	

ORDERING INFORMATION

Part Number	Component Package	Marking	QTY/Tube	QTY/Box	QTY/Carton
MBR30200PTQ	TO-247	MBR30200PTQ	30PCS	450PCS	2250PCS

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