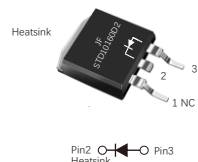


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated Chip
- Low VF,Low power loss
- Flexible solution for reliable AC power rectification
- High surge capability
- High temperature soldering guaranteed:260°C/10s at terminals
- Component in accordance to RoHS 2015/863/EU



TO-263 (D²PAK)
STD10160D2



MECHANICAL DATA

- Case: JEDEC TO-263
- Molding compound meets UL94V-0 flammability rating
- Terminals: Lead solderable per J-STD-002 and JESD22-B102
- Polarity: As marked

TYPICAL APPLICATIONS

- Input Rectification
- Bypass Diode
- Polarity Reverse Protection
- EV / HEV Battery Chargers

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified)

Parameters	Symbols	Value	Units
Maximum repetitive peak reverse voltage	V _{RRM}	1600	V
Maximum RMS voltage	V _{RMS}	1130	V
Maximum DC blocking voltage	V _{DC}	1600	V
Maximum average forward rectified current(D=0.5 Rectangular wave)	I _{F(AV)}	10.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load, (JEDEC method Total device)	I _{FSM}	120	A
Maximum Forward voltage at 10A(Note 1)	V _F	1.30	V
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I _R	T _J =25°C	5.0
		T _J =125°C	250
Typical thermal resistance (Note 2)	R _{θJC}	0.95	°C/W
Operating junction temperature range	T _J	-55 to+150	°C
Storage temperature range	T _{STG}	-55 to+150	°C

Notes: 1.Pulse test: 300 us pulse width,1% duty cycle
2.When mounted on 1" square (650 mm²) PCB of FR-4

FIG.1-FORWARD CURRENT DERATING CURVE

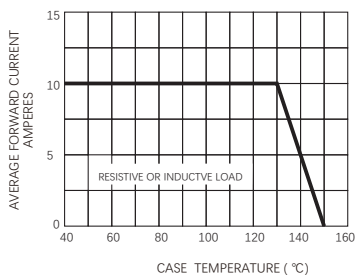


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

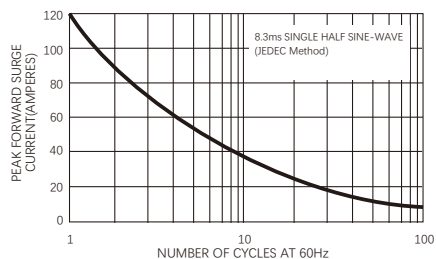


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

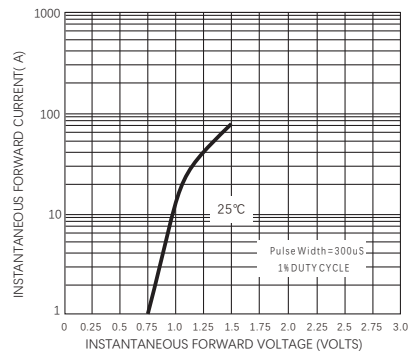
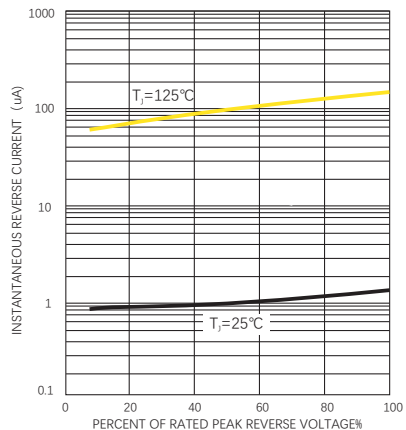
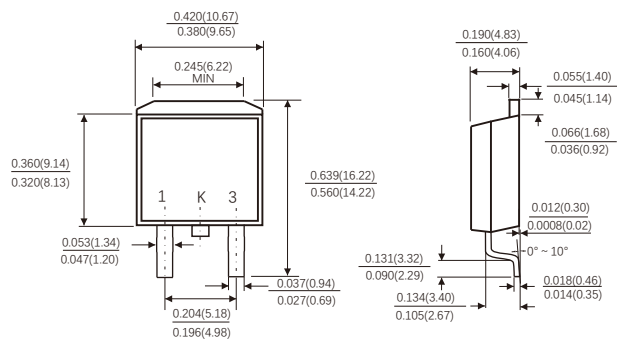


FIG.4-TYPICAL REVERSE CHARACTERISTICS



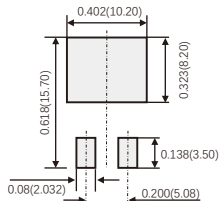
Dimensions in inches and (millimeters)

TO-263



Suggested Pad Layout

(TO-263)



(对于TO263, 设计者可参考推荐值根据焊接工艺要求自行确定适合的焊盘尺寸)
(For TO-263, Designers can refer to the recommended values according to the manufacturing process requirements to determine the appropriate pad size)

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