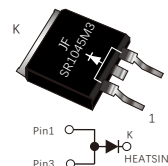


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds,
- Component in accordance to RoHS 2015/863/EU



TO-252 (DPAK)



MECHANICAL DATA

- Case: JEDEC TO-252 molded plastic body
- Terminals: Solderable per MIL-STD-202,method 208
- Polarity: As marked
- Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

Parameters	Symbols	Value	Units
Maximum repetitive peak reverse voltage	V_{RRM}	45	Volts
Maximum RMS voltage	V_{RMS}	32	Volts
Maximum DC blocking voltage	V_{DC}	45	Volts
Maximum average forward rectified current (see Fig.1)	$I(AV)$	10.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150.0	Amps
Maximum instantaneous forward voltage at 10.0 A(Note 1)	V_F	0.60	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_A=25^{\circ}C$	100	μA
	$T_A=100^{\circ}C$	5	mA
Typical thermal resistance (Note 2)	$R_{\theta JC}$	2.5	$^{\circ}C/W$
Operating junction temperature range	T_J	-55 to+150	$^{\circ}C$
Storage temperature range	T_{STG}	-55 to+150	$^{\circ}C$

- Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle
2.Thermal resistance from junction to case

FIG.1-FORWARD CURRENT DERATING CURVE

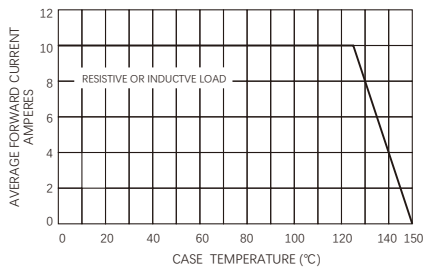


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

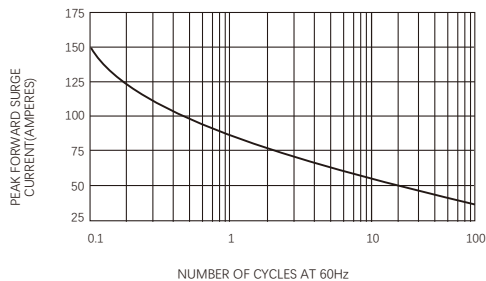


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

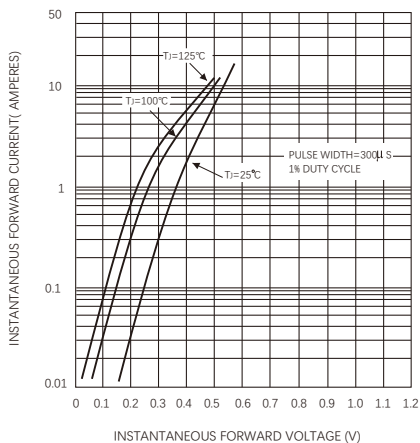


FIG.4-TYPICAL REVERSE CHARACTERISTICS

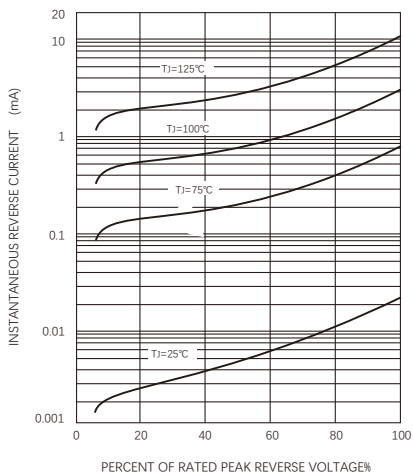
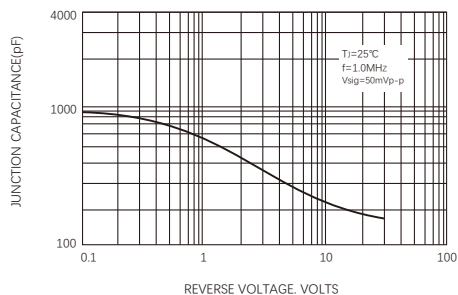
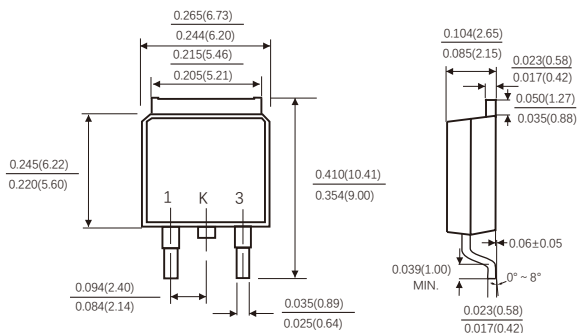


FIG.5-TYPICAL JUNCTION CAPACITANCE

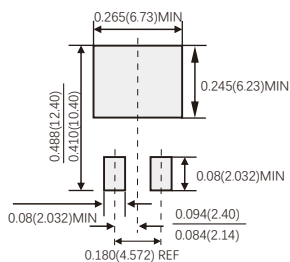


TO-252



Suggested Pad Layout

(TO-252)



(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)
(Designers can refer to the recommended values according to the manufacturing process requirements to determine the appropriate pad size)

AVAILABLE PACK INFORMATION

Product code	Pack	Carton Size L×W×H(mm)	Inner Box Size L×W×H(mm)	Tube Length (mm)	Inner Box Number	Tube Number Per A Inner Box	Part Number Per A Tube	Quantity(carton) (K)
SR1045M3- TO-252	Tube	565×225×170	548×151×37	520	5	60	75	22.5
Product code	Pack	Carton Size L×W×H(mm)	Inner Box Size L×W×H(mm)	Reel Diameter (mm)	Inner Box Number	Reel Number Per A Inner Box	Part Number Per A Reel	Quantity(carton) (K)
SR1045M3- TO-252	Reel	364×364×235	346×346×23	φ330	8	1	2500	20

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