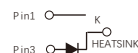


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- 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, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2015/863/EU

TO-252 DPAK



MECHANICAL DATA

- Case: JEDEC TO-252 molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- 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}	600	Volts
Maximum RMS voltage	V_{RMS}	420	Volts
Maximum DC blocking voltage	V_{DC}	600	Volts
Maximum average forward rectified current(see Fig.1)	$I(AV)$	16.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150	Amps
Maximum instantaneous forward voltage at 16.0 A(Note 1)	V_F	1.7	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_c=25^{\circ}C$	5	μA
	$T_c=125^{\circ}C$	50	
Maximum Reverse Recovery Time (Note 2)	t_{rr}	35	nS
Typical thermal resistance (Note 3)	$R_{\theta JC}$	1.8	$^{\circ}C/W$
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 μ s pulse width,1% duty cycle

2. Reverse recovery test conditions $I_F=0.5A,I_R=1.0A,I_{rr}=0.25A$

3. Thermal resistance from junction to case

FIG.1-FORWARD CURRENT DERATING CURVE

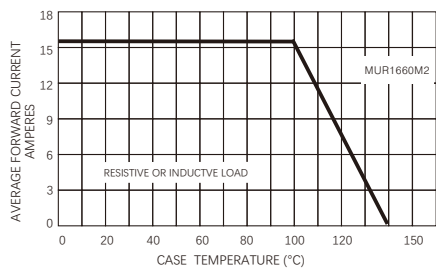


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

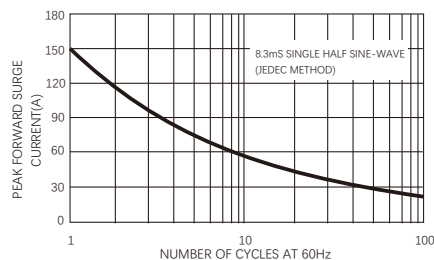


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

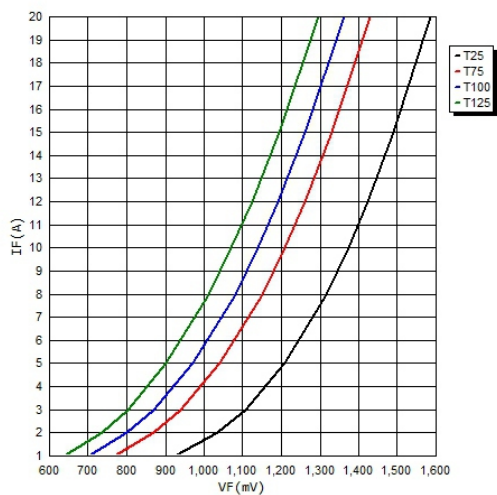


FIG.4-TYPICAL REVERSE CHARACTERISTICS

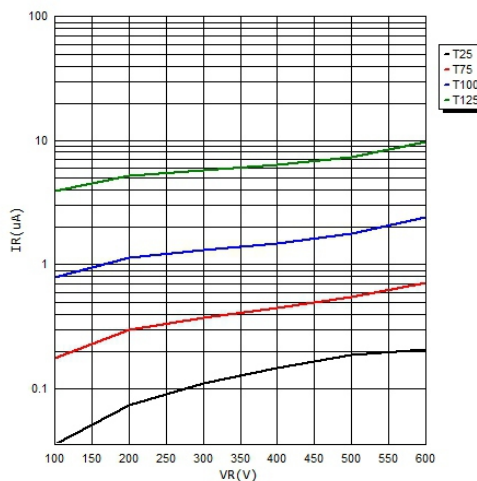
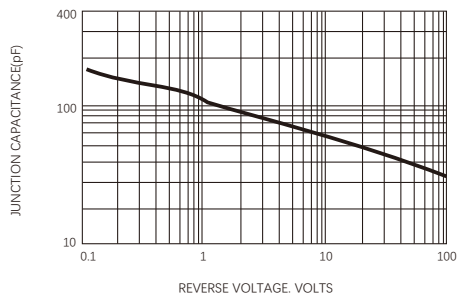
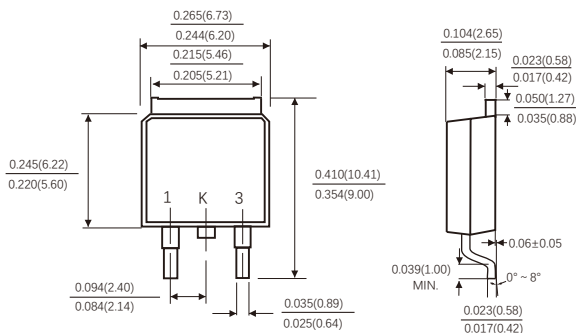


FIG.5-TYPICAL JUNCTION CAPACITANCE

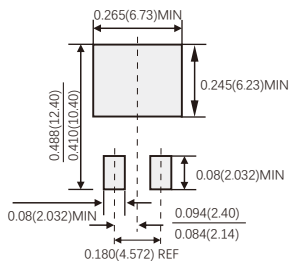


TO-252



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)

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