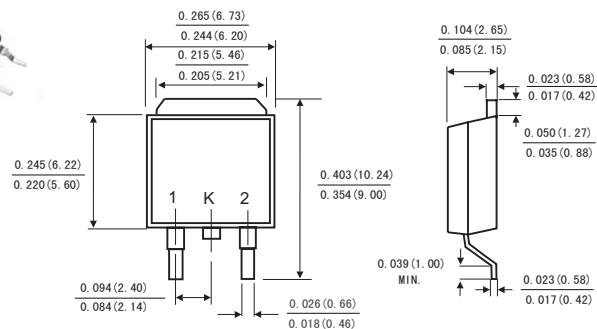


FEATURES

- 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 2011/65/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%.)

		Symbols	MUR520M2	MUR540M2	MUR560M2	Units
Maximum repetitive peak reverse voltage		V _{RRM}	200	400	600	Volts
Maximum RMS voltage		V _{RMS}	140	280	420	Volts
Maximum DC blocking voltage		V _{DC}	200	400	600	Volts
Maximum average forward rectified current(see Fig.1)		I(AV)	5.0			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	75			Amps
Maximum instantaneous forward voltage at 10.0 A(Note 1)		V _F	0.975	1.3	1.7	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _A =25°C	I _R	5			uA
	T _A =125°C		500			
Maximum Reverse Recovery Time (Note 2)		T _{rr}	35			ns
Typical thermal resistance (Note 3)		R _{θJC}	2.5			°C/W
Operating junction temperature range		T _J	-40 to+150			°C
Storage temperature range		T _{STG}	-40 to+150			°C

Notes: 1. Pulse test: 300μs 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

RATINGS AND CHARACTERISTIC CURVES MUR520M2 THRU MUR560M2

FIG.1-FORWARD CURRENT DERATING CURVE

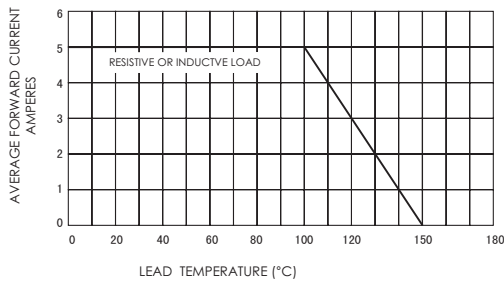


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

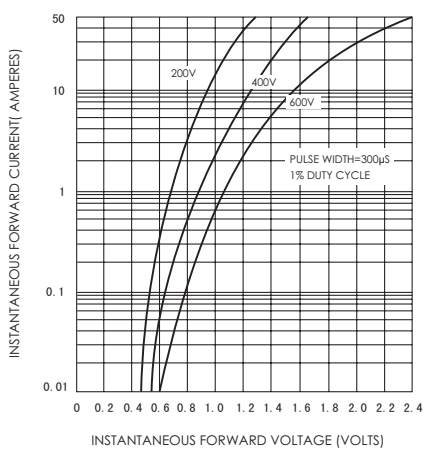


FIG.5-TYPICAL JUNCTION CAPACITANCE

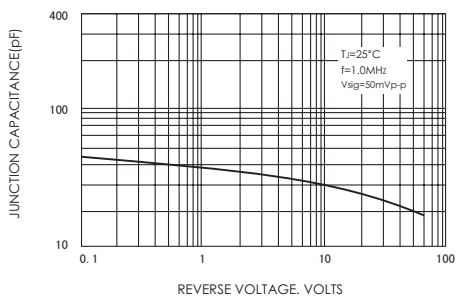


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

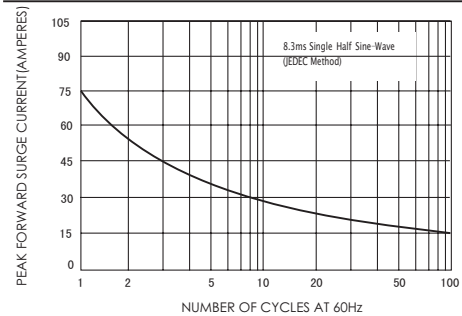


FIG.4-TYPICAL REVERSE CHARACTERISTICS

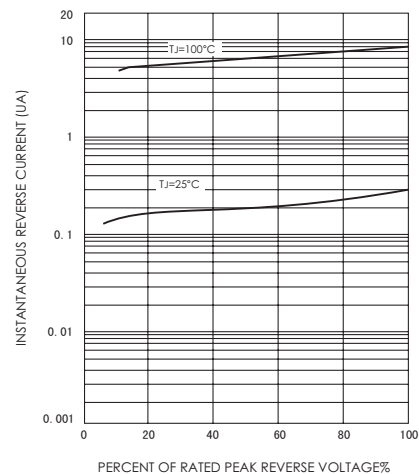


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

