



S E M I C O N D U C T O R

# MUR540D2

GLASS PASSIVATED SUPER FAST RECTIFIER

Reverse Voltage - 400 Volts

Forward Current - 5.0Amperes

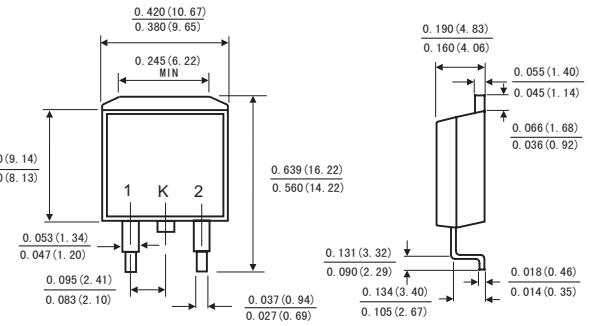
## FEATURES

- 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-263

## D2PAK



Dimensions in inches and (millimeters)

## MECHANICAL DATA

- Case: JEDEC TO-263 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	MUR540D2	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	400	Volts
Maximum RMS voltage	V <sub>RMS</sub>	280	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	400	Volts
Maximum average forward rectified current(see Fig.1)	I <sub>(AV)</sub>	5.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	75	Amps
Maximum instantaneous forward voltage at 5.0 A(Note 1 )	V <sub>F</sub>	1.25	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I <sub>R</sub>	5 500	uA
Maximum Reverse Recovery Time (Note 2)	T <sub>rr</sub>	35	ns
Typical thermal resistance (Note 3)	R <sub>θJC</sub>	2.5	°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to+150	°C
Storage temperature range	T <sub>STG</sub>	-55 to+150	°C

- Notes: 1. Pulse test: 300μs pulse width,1% duty cycle  
2. Reverse recovery test conditions If=0.5A,Ir=1.0A, Irr=0.25A  
3. Thermal resistance from junction to case

## RATINGS AND CHARACTERISTIC CURVES MUR540D2

FIG.1-FORWARD CURRENT DERATING CURVE

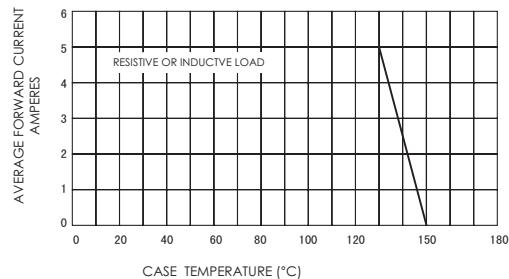


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

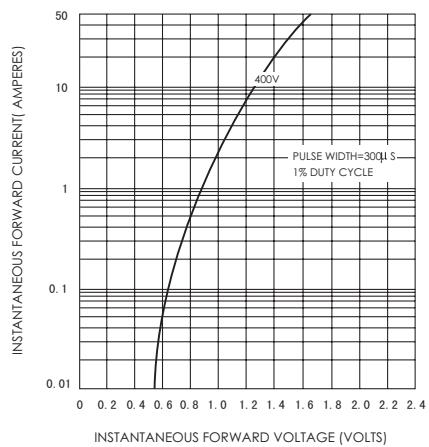


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

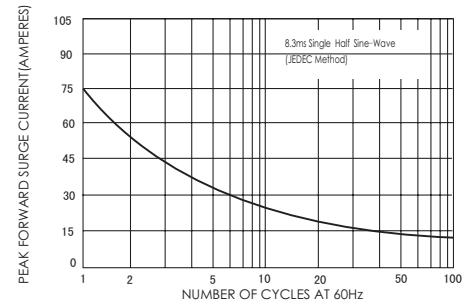


FIG.4-TYPICAL REVERSE CHARACTERISTICS

