

MUR520 THRU MUR560

GLASS PASSIVATED SUPER FAST RECTIFIER

Reverse Voltage - 200 -600 Volts

Forward Current - 5.0Amperes

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed
250°C/10 seconds at terminals

Mechanical Data

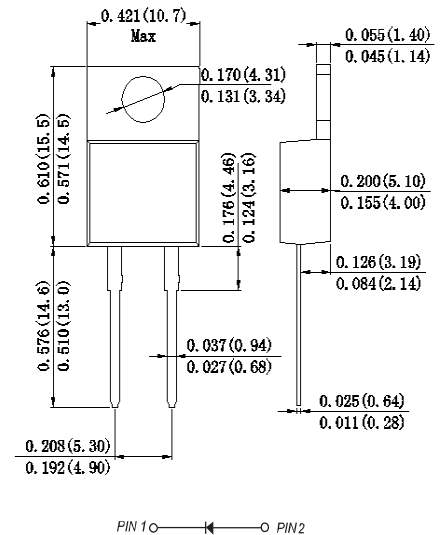
Case : Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750,Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

TO-220AC



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	Symbols	MUR520	MUR540	MUR560	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	0.98	1.3	1.7	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_A = 25^\circ\text{C}$	5			uA
	$T_A = 125^\circ\text{C}$	500			
Maximum Reverse Recovery Time (Note 2)	T_{rr}	35			ns
Typical thermal resistance (Note 3)	$R_{\theta JC}$	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

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FIG.1-FORWARD CURRENT DERATING CURVE

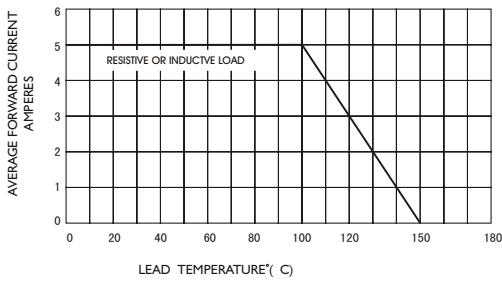


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

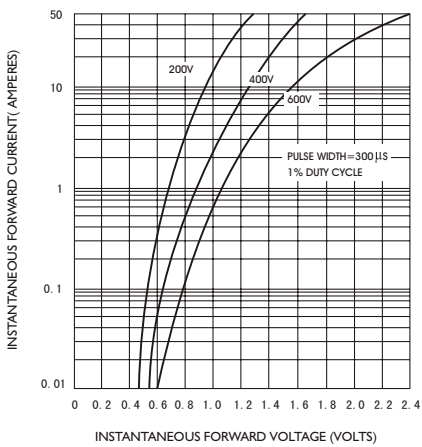


FIG.5-TYPICAL JUNCTION CAPACITANCE

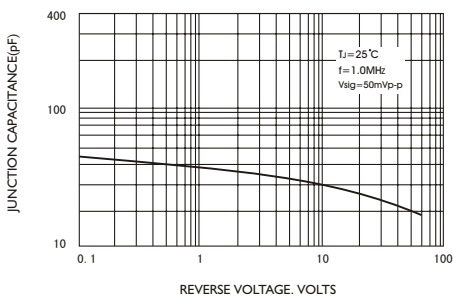


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

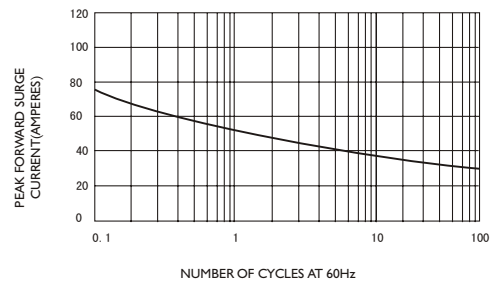


FIG.4-TYPICAL REVERSE CHARACTERISTICS

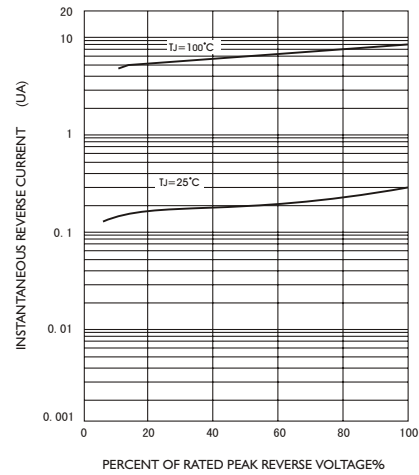


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

