MURS120-A-18C

ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 200V **CURRENT: 1.0A**

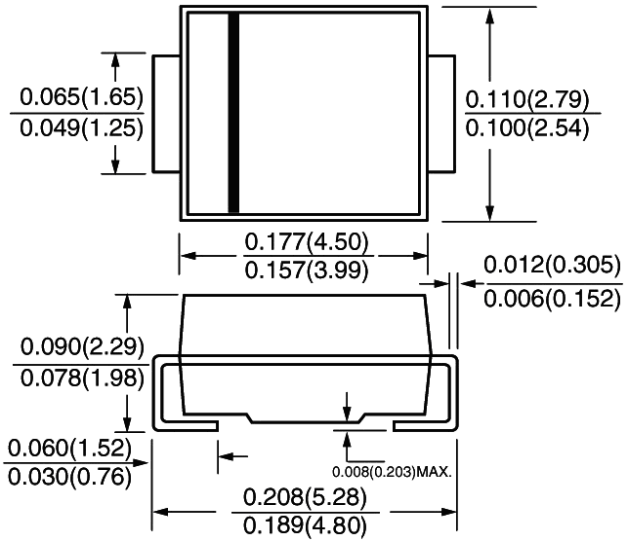
FEATURE

Ultrafast Nanosecond Recovery Times
150°C Operating Junction Temperature
Low Forward Voltage
Low Leakage Current
High Temperature Glass Passivated Junction
Meet Standard of AEC-Q101

Mechanical Characteristics

Case: JEDEC SMA/DO-214AC molded plastic body
Terminals: Solder plated, solderable per J-STD-002
Polarity: Color band denotes cathode end
Marking: M120

SMA / DO—214AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	Symbol	MURS120-A-18C	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	200	V
Maximum RMS Voltage	Vrms	140	V
Maximum DC blocking Voltage	Vdc	200	V
Maximum Average Forward Rectified Current 3/8"lead length at TL =125°C	If(av)	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	40	A
Maximum Forward Voltage at rated Forward Current	Vf	0.875	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	10 150	μA
Maximum Reverse Recovery Time (Note 1)	Trr	25	nS
Typical Junction Capacitance (Note 2)	Cj	25	pF
Typical Thermal Resistance (Note 3)	Rth(jl)	16	°C /W
Storage and Operating Temperature Range	Tstg, Tj	-55 to +150	°C

Note:
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to terminal mounted on 5×5mm copper pad area

Fig. 1 — Forward Current Derating Curve

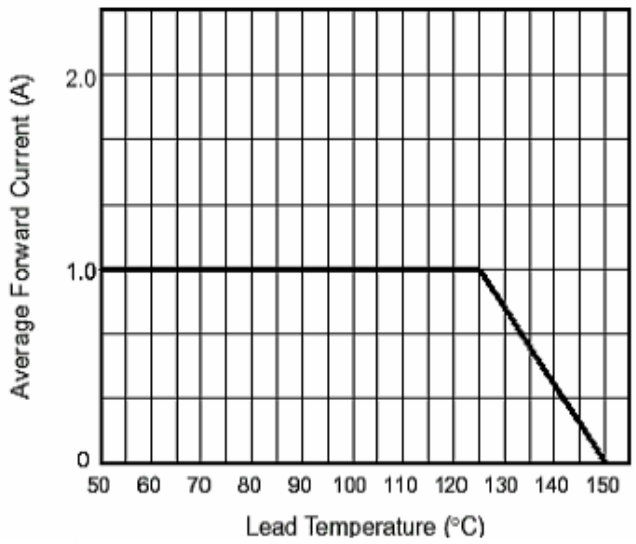


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

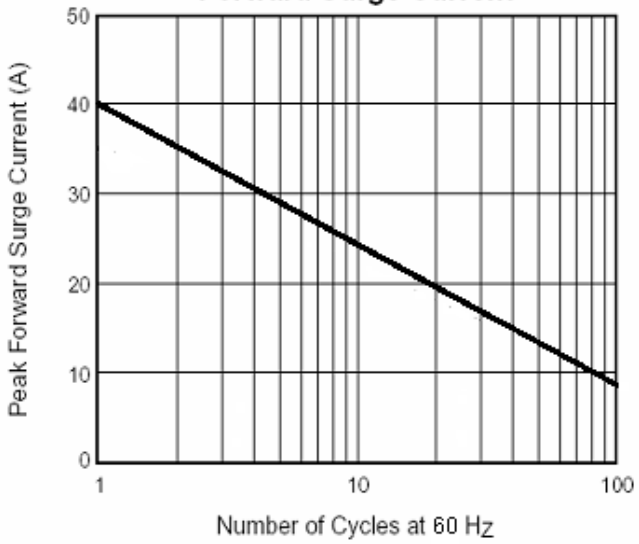


Fig. 3 – Typical Instantaneous Forward Characteristics

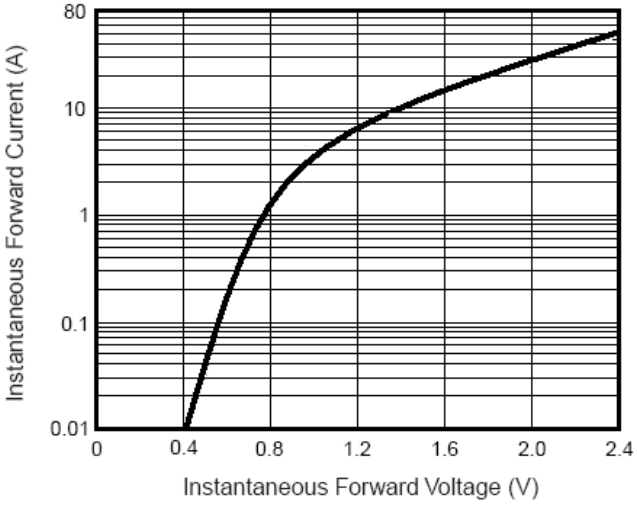


Fig. 4 – Typical Reverse Leakage Characteristics

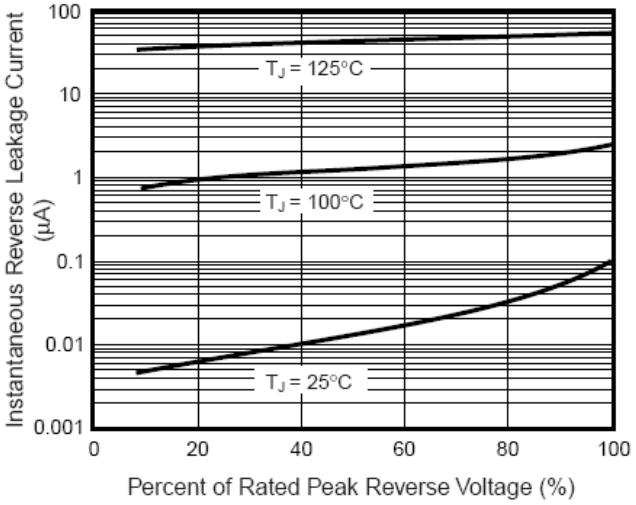


Fig. 5 – Typical Junction Capacitance