

MURS105 THRU MURS160

ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 50 TO 600V

CURRENT: 1.0A

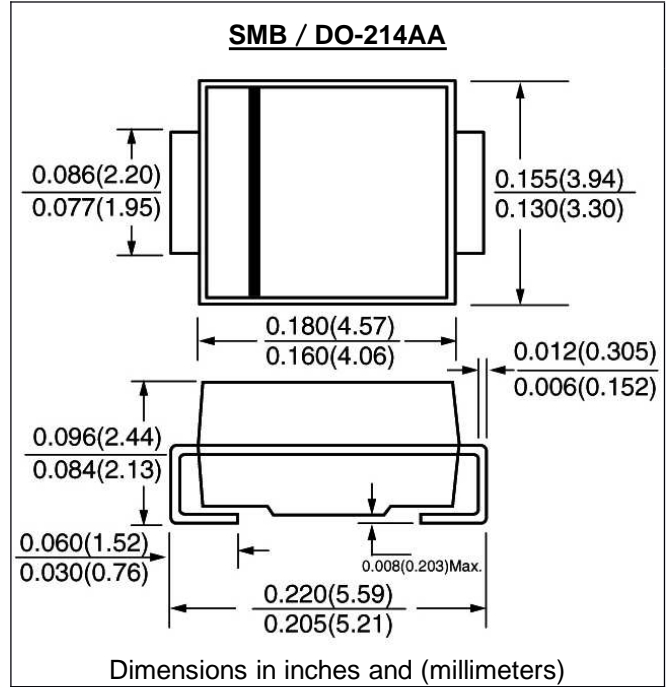


FEATURE

Ultrafast Nanosecond Recovery Times
150°C Operating Junction Temperature
Low Forward Voltage
Low Leakage Current
High Temperature Glass Passivated Junction

Mechanical Characteristics

Case: JEDEC SMB/DO-214AA molded plastic body
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mark: M105B M110B M120B M130B M140B M160B



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	MURS 105	MURS 110	MURS 120	MURS 130	MURS 140	MURS 160	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	50	100	200	300	400	600	V
Maximum RMS Voltage	V _{rms}	35	70	140	210	280	420	V
Maximum DC blocking Voltage	V _{dc}	50	100	200	300	400	600	V
Maximum Average Forward Rectified Current 3/8" lead length at T _L = 125°C	I _{f(av)}	1.0						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	40			35			A
Maximum Forward Voltage at rated Forward Current and 25°C	V _f	0.875			1.25			V
Maximum DC Reverse Current Ta = 25°C at rated DC blocking voltage Ta = 125°C	I _r	10			150			μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	25			50			nS
Typical Junction Capacitance (Note 2)	C _j	25						pF
Typical Thermal Resistance (Note 3)	R _{th(jl)}	13						°C /W
Storage and Operating Temperature Range	T _{stg} , T _j	-55 to +150						°C

Note:

- Reverse Recovery Condition I_f = 0.5A, I_r = 1.0A, I_{rr} = 0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient at 3/8" lead length, P.C. Board Mounted

Fig. 1 — Forward Current Derating Curve

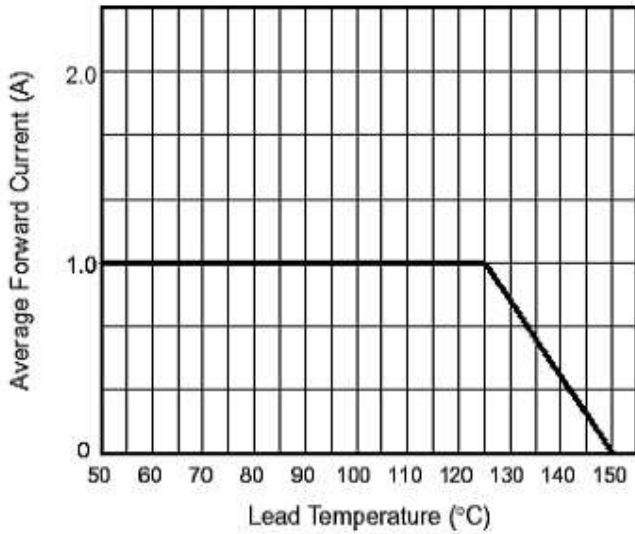


Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current

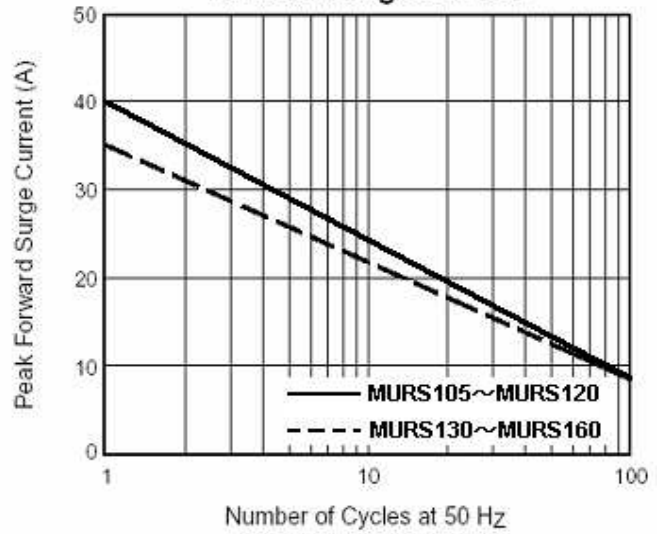


Fig. 3 — Typical Instantaneous Forward Characteristics

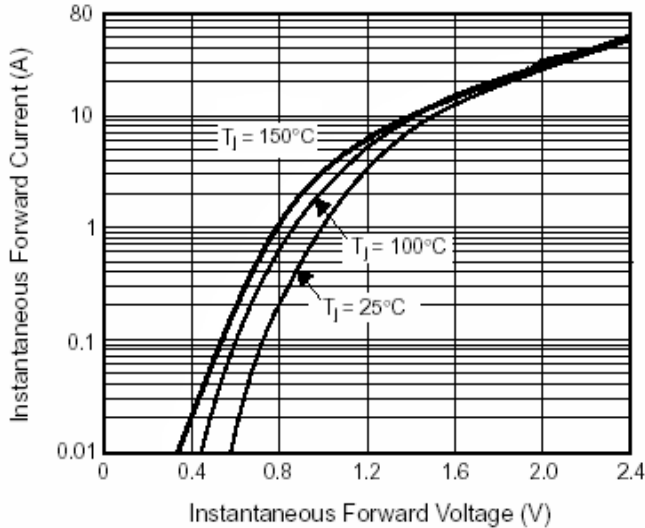


Fig. 4 — Typical Reverse Leakage Characteristics

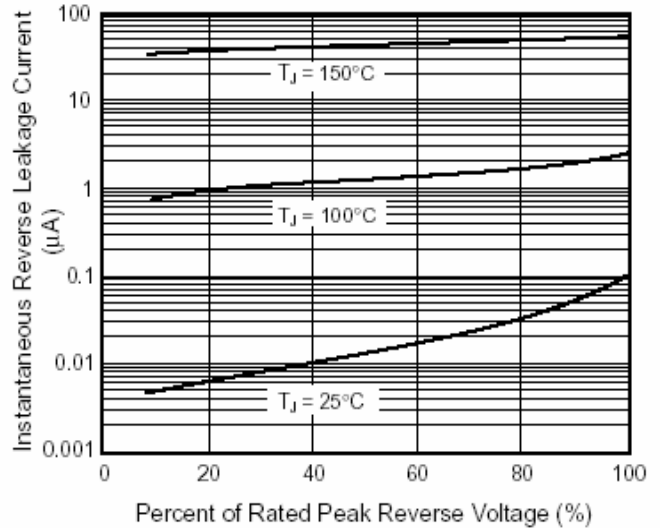


Fig. 5 — Typical Junction Capacitance

