



YENYO

MUR140B THRU MUR160B

Surface Mount Efficient Fast Recovery Rectifier

Features

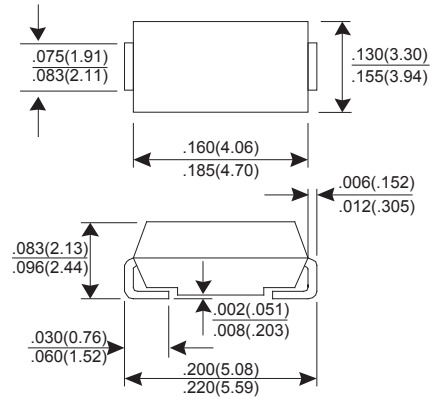
- * Fast switching for high efficiency
- * Low forward voltage drop
- * High current capability
- * Low reverse leakage current
- * High surge current capability
- * Glass passivated chip

Mechanical Data

- * Case: Molded plastic SMB/DO-214AA
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solderable per MIL-STD-750 method 2026
- * Polarity: Color band denotes cathode
- * Mounting position: Any
- * Weight: 0.093 gram

**Voltage Range 400 to 600 V
Current 1.0 Ampere**

SMB/DO-214AA



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

CHARACTERISTIC	SYMBOL	MUR140B	MUR160B	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	400	600	V
Maximum RMS Voltage	VRMS	280	420	V
Maximum DC Blocking Voltage	VDC	400	600	V
Maximum Average Forward Rectified Current TA=135°C	IF(AV)	1.0		A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	35		A
Maximum Instantaneous Forward Voltage @ 25°C @ 1.0A @ 150°C	VF	1.25	1.05	V
Maximum DC Reverse Current @ TJ=25°C At Rated DC Blocking Voltage @ TJ=150°C	IR	5.0	150	uA
Maximum Reverse Recovery Time (Note 1)	Trr	50		nS
Typical junction Capacitance (Note 2)	CT	10		pF
Typical Thermal Resistance (Note 3)	RθJT	15		°CW
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to + 150 / -55 to + 175		°C

NOTES : (1) Reverse recovery test conditions IF = 0.5A, IR = 1.0A, IRR = 0.25A.
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.
(3) Unit mounted on PC board with 5.0mm² (0.013mm thick) copper pads as heat sink.

RATINGS AND CHARACTERISTIC CURVES MUR140B THRU MUR160B

FIG.1 - FORWARD CURRENT DERATING CURVE

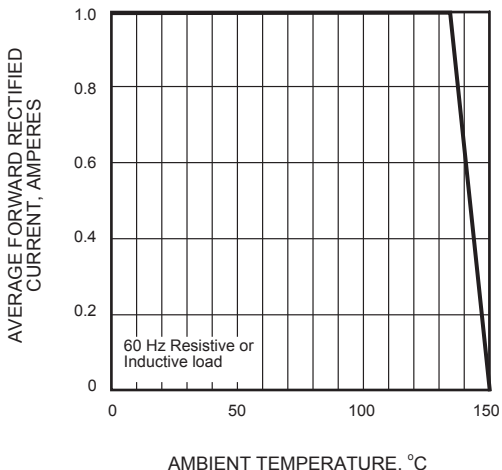


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

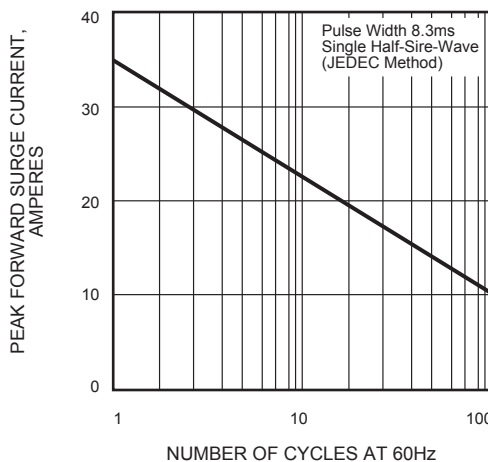


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

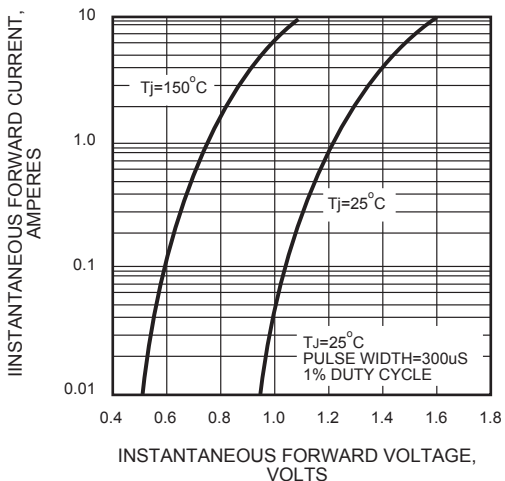


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

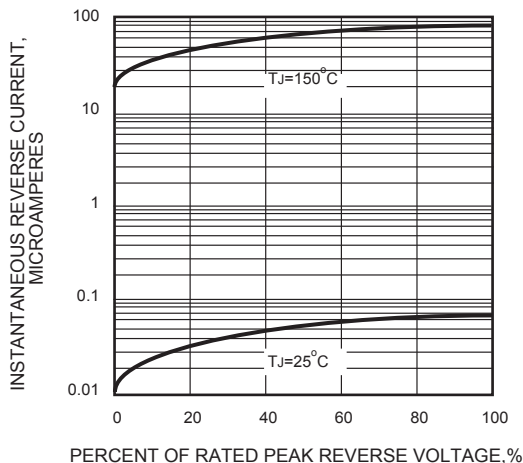


FIG.5 - TYPICAL JUNCTION CAPACITANCE

