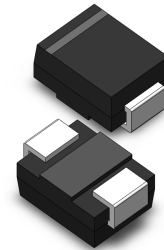


**VOLTAGE RANGE: 50 - 600V**  
**CURRENT: 1.0 A**

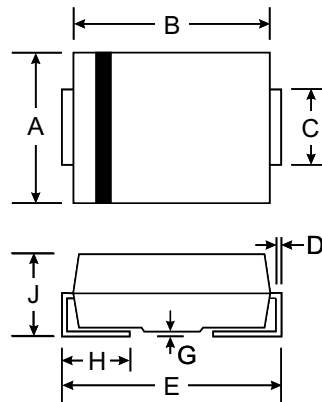
### Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Low Power Loss
- Super-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O



### Mechanical Data

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)



SMB(DO-214AA)		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.70
C	1.91	2.21
D	0.15	0.31
E	5.00	5.59
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		



### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

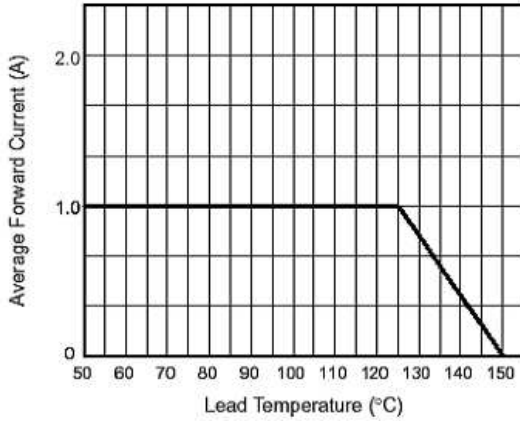
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	MURS 105	MURS 110	MURS 115	MURS 120	MURS 130	MURS 140	MURS 160	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	150	200	300	400	600	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	105	140	210	280	420	V
Average Rectified Output Current <small>T<sub>L</sub> = 150 °C T<sub>L</sub> = 125 °C</small>	I <sub>O</sub>	1.0 2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	40				35			A
Forward Voltage <small>@ I<sub>F</sub> = 1.0A</small>	V <sub>FM</sub>	0.875				1.25			V
Peak Reverse Current At Rated DC Blocking Voltage <small>@ T<sub>A</sub> = 25°C @ T<sub>A</sub> = 100°C</small>	I <sub>RM</sub>					10.0 150			μA
Reverse Recovery Time (Note 1)	t <sub>rr</sub>					35			nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>					25			pF
Typical Thermal Resistance (Note 3)	R <sub>θJL</sub>					13			°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>					-65 to +150			°C

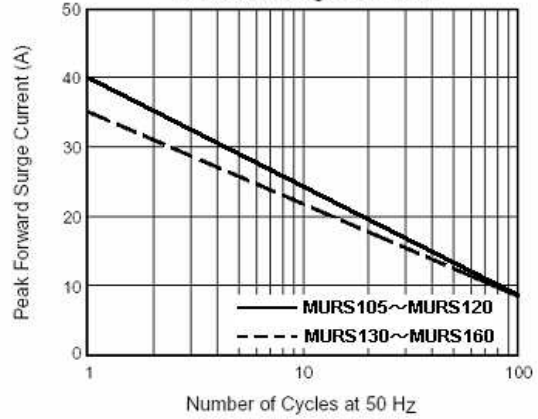
Note: 1. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.25A. See figure 5.  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.  
 3. Mounted on P.C. Board with 8.0mm<sup>2</sup> land area.

## RATINGS AND CHARACTERISTIC CURVES MURS105 THRU MURS160

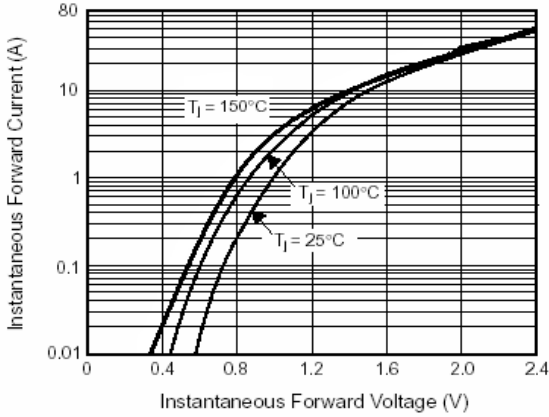
**Fig. 1 — Forward Current Derating Curve**



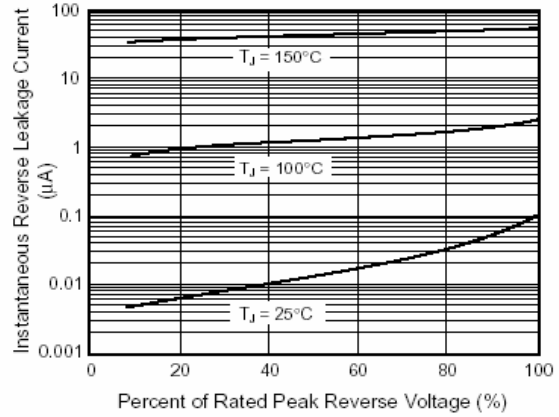
**Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 — Typical Instantaneous Forward Characteristics**



**Fig. 4 — Typical Reverse Leakage Characteristics**



**Fig. 5 — Typical Junction Capacitance**

