

VOLTAGE RANGE: 50 - 600V

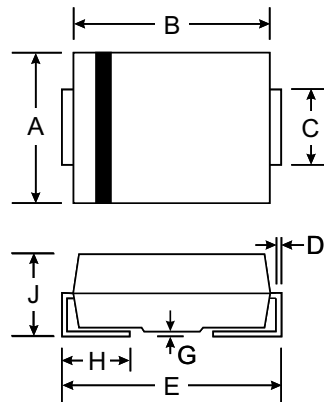
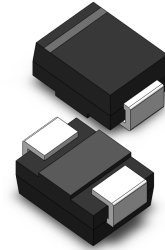
CURRENT: 1.0 A

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 $T_A = 25^\circ\text{C}$ 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 _{RRM} V _{RWM} V _R	50	100	150	200	300	400	600	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	105	140	210	280	420	V
Average Rectified Output Current T _L = 150 °C T _L = 125 °C	I _O	1.0 2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	40				35			A
Forward Voltage @I _F = 1.0A	V _{FM}	0.875				1.25			V
Peak Reverse Current At Rated DC Blocking Voltage @T _A = 25°C @T _A = 100°C	I _{RM}	10.0 150						μA	
Reverse Recovery Time (Note 1)	t _{rr}	35						nS	
Typical Junction Capacitance (Note 2)	C _j	25						pF	
Typical Thermal Resistance (Note 3)	R θ _{JL}	13						°C/W	
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150						°C	

Note: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$. 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 8.0mm² land area.



SUNMATE

RATINGS AND CHARACTERISTIC CURVES MURS105 THRU MURS160

Fig. 1 — Forward Current Derating Curve

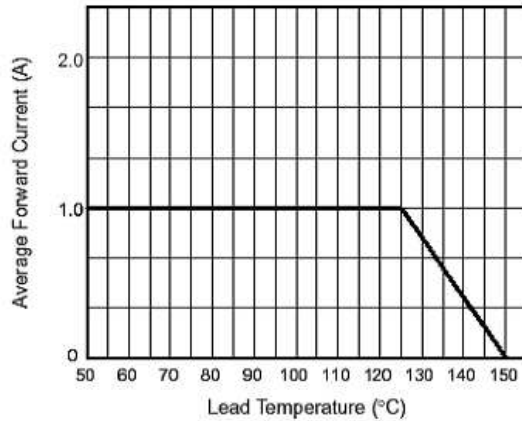


Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current

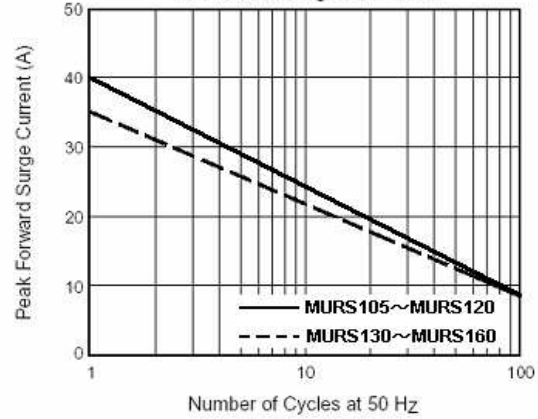


Fig. 3 — Typical Instantaneous Forward Characteristics

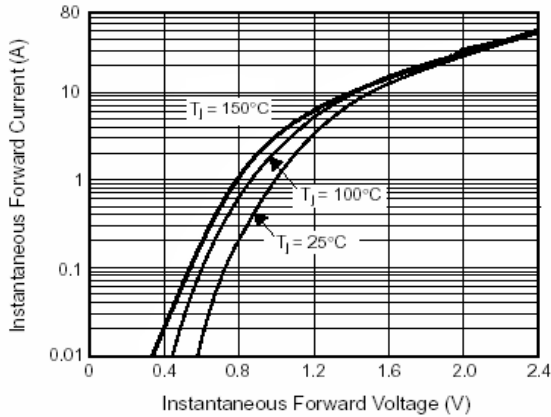


Fig. 4 — Typical Reverse Leakage Characteristics

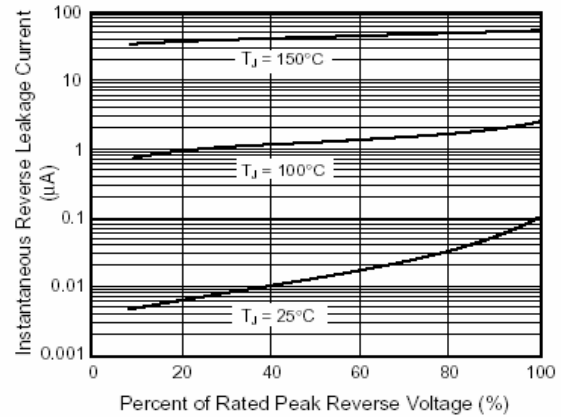


Fig. 5 — Typical Junction Capacitance

