

Features

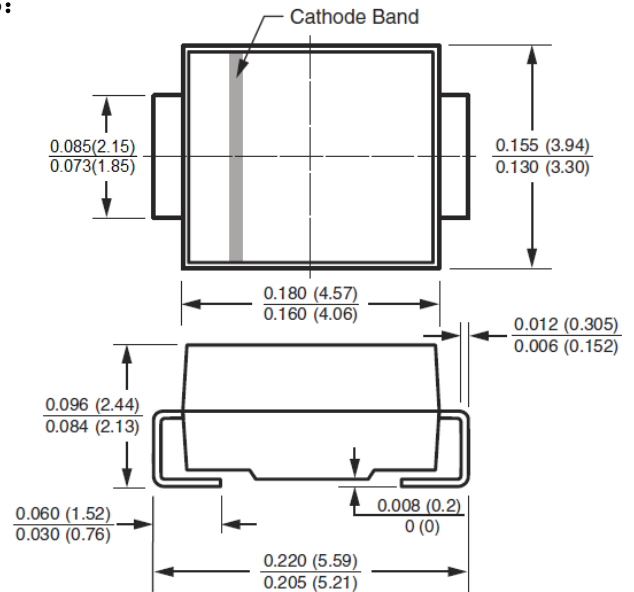
- * Glass passivated junction
- * Ideal for automated placement
- * Ultrafast recovery time for high efficiency
- * Low forward voltage, low power loss
- * High Temp Soldering: 260°C For 10seconds at Terminals



RoHS
COMPLIANT

Package Outline Dimensions in inches (millimeters)

SMB:



Mechanical Data

- * Case: DO-214AA Molded plastic
- * Terminals: Solder plated
- * Polarity: Indicated by cathode band
- * Standard packaging:
12mm tape(ELA STD RS-481)

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbols	MURS 105	MURS 110	MURS 115	MURS 120	MURS 140	MURS 160	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	280	420	V
Maximum D.C Blocking Voltage	V_{DC}	50	100	150	200	400	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0						A
Peak Forward Surge Current, 8.3ms single half sine-wave	I_{FSM}	40				35		A
Maximum Instantaneous Forward Voltage at 1A(Note1)	V_F	0.875 0.710				1.25 1.05		V
Maximum D.C Reverse Current @ $T_J=25^\circ\text{C}$ at Rated D.C Blocking Voltage @ $T_J=150^\circ\text{C}$	I_R	2 50				5 150		μA
Maximum Reverse Recovery Time(Note2)	T_{rr}	25				50		nS
Typical Thermal Resistance	$R_{\theta JL}$	13						$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J/T_{STG}	-55 + 175						$^\circ\text{C}$

Note: 1、 Pulse test: $t_p=300\mu\text{s}$, 1% duty cycle 2、 Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$.

Ratings and Characteristic Curves

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

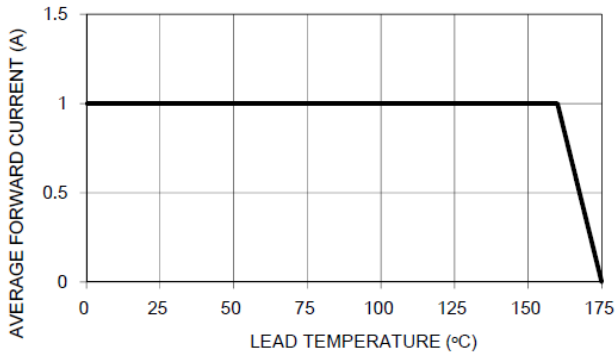


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

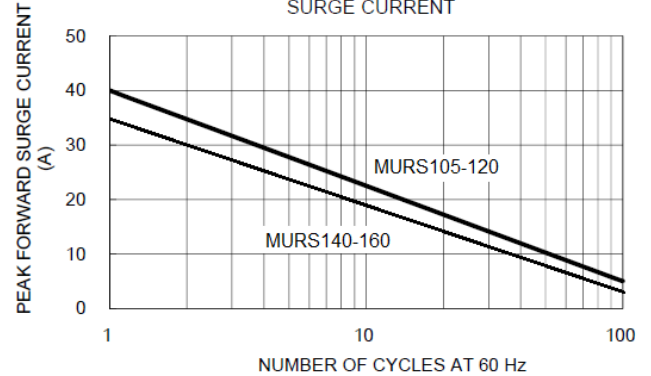


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

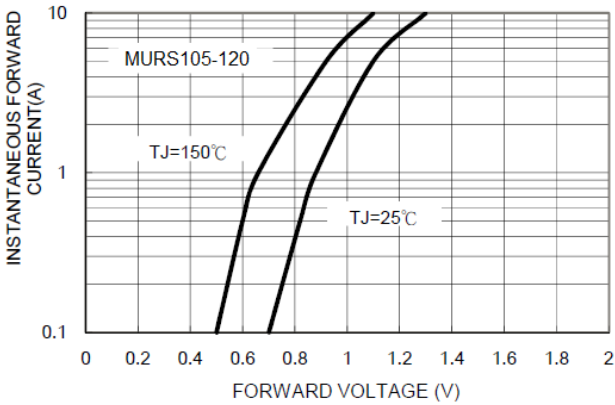


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

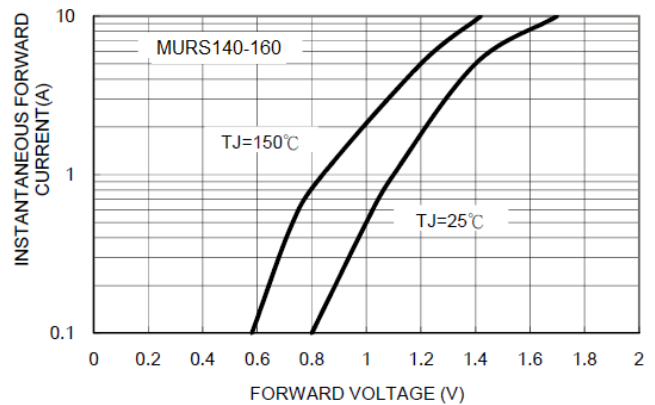


FIG. 5 TYPICAL REVERSE CHARACTERISTICS

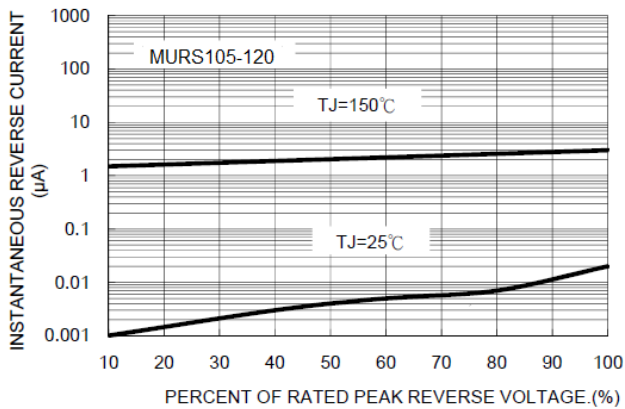


FIG. 6 TYPICAL REVERSE CHARACTERISTICS

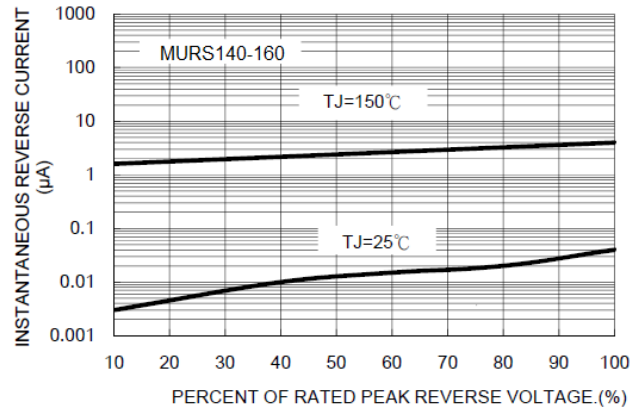
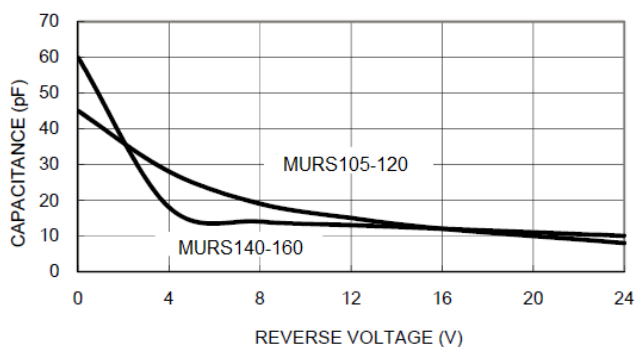


FIG. 7 TYPICAL JUNCTION CAPACITANCE





MURS105 THRU MURS160
Surface Mount Glass Passivated Ultra Fast Rectifiers

Ordering Information

Part No.	Package	Packing
MURS105-MURS160	SMB	3K/Reel