

MURA160

PRV : 600 Volts
Io : 1.0 Amperes

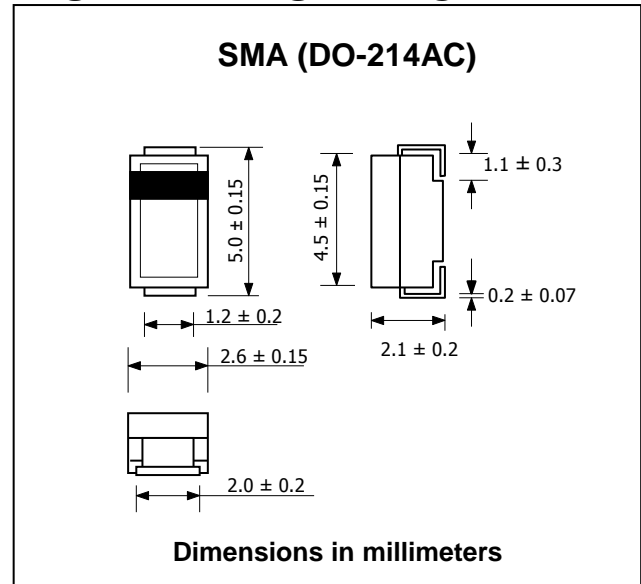
FEATURES :

- * Small Compact Surface Mountable Package
- * High Temperature Glass Passivated Junction
- * Low forward voltage drop
- * Ultra fast recovery time
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SMA Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.067 gram

SURFACE MOUNT ULTRAFAST RECTIFIER



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%.

RATING	SYMBOL	VALUE	UNIT
Maximum Peak Repetitive Reverse Voltage	V_{RRM}	600	V
Maximum Working Peak Reverse Voltage	V_{RWM}	600	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Current @ $T_L = 145\text{ }^{\circ}\text{C}$	$I_{F(AV)}$	1.0	A
Maximum Non-Repetitive Peak Surge Current (Surge Applied at Rate Load Conditions Halfwave, Single Phase, 60 Hz)	I_{FSM}	30	A
Maximum Instantaneous Forward Voltage ($I_F = 1.0\text{ A}$, $T_J = 25\text{ }^{\circ}\text{C}$)	V_F	1.25	V
Maximum Instantaneous Reverse Current (Note 1) (Rated dc Voltage, $T_J = 25\text{ }^{\circ}\text{C}$)	I_R	5.0	μA
(Rated dc Voltage, $T_J = 150\text{ }^{\circ}\text{C}$)	$I_{R(H)}$	150	
Thermal Resistance, Junction to Ambient (Note 2)	$R_{\theta JA}$	216	$^{\circ}\text{C/W}$
Maximum Reverse Recovery Time ($I_F = 1.0\text{ A}$, $di/dt = 50\text{ A}/\mu\text{s}$)	T_{rr}	75	ns
Operating Junction Temperature Range	T_J	- 65 to + 175	$^{\circ}\text{C}$

Notes :

- (1) Pulse Test : Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$.
- (2) Rating Applies when surface mounted on the minimum pad size recommended, PC Board FR-4.

RATING AND CHARACTERISTIC CURVES (MURA160)

FIG.1 - CURRENT DERATING, LEAD

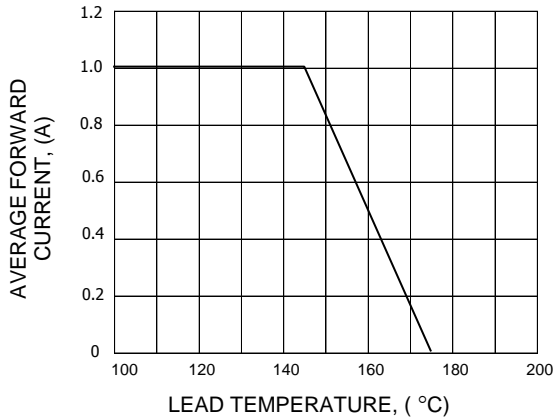


FIG.2 - MAXIMUM JUNCTION CAPACITANCE

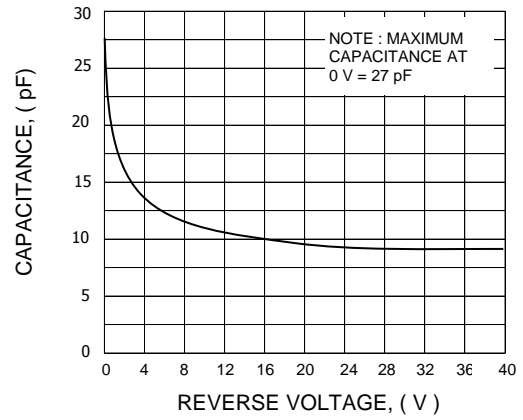


FIG.3 - MAXIMUM FORWARD VOLTAGE

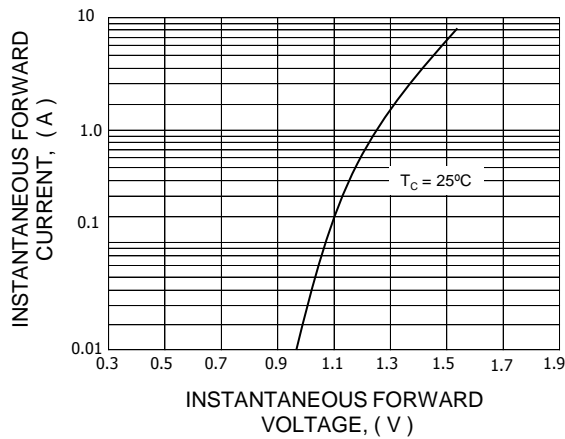


FIG. 4 - MAXIMUM REVERSE CURRENT

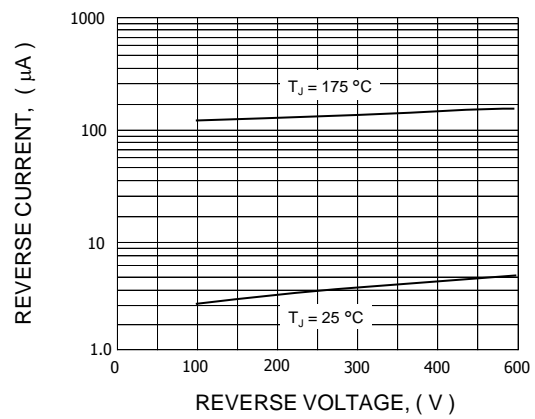


FIG. 5 - POWER DISSIPATION

