

MURA130, MURA140

SURFACE MOUNT SUPER FAST RECTIFIERS

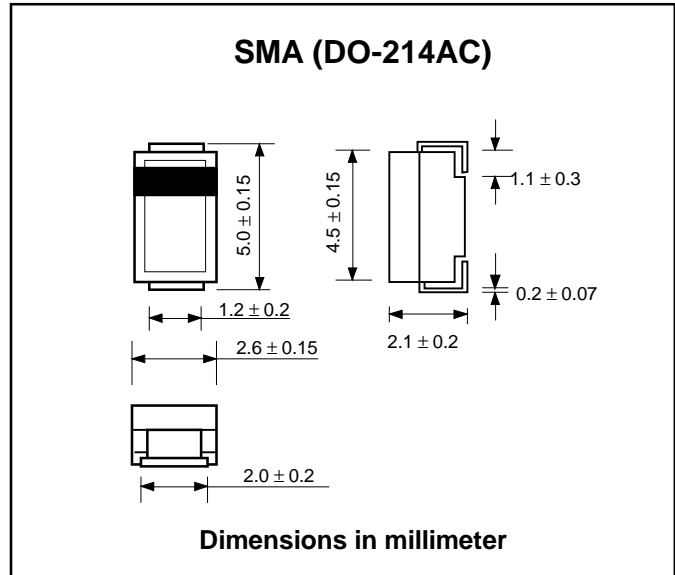
PRV : 300 - 400 Volts
I_o : 1.0 Ampere

FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Super 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



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	MURA130	MURA140	UNIT
Maximum Peak Repetitive Reverse Voltage	V _{RRM}	300	400	V
Maximum Working Peak Reversr Voltage	V _{RWM}	300	400	V
Maximum DC Blocking Voltage	V _{DC}	300	400	V
Maximum Average Forward Current @ T _L = 150 °C	I _{F(AV)}	1.0		V
Maximum Non-Repetitive Peak Surge Current (Surge Applied at Rate Load Conditions Halfwave, Single Phase, 60 Hz)	I _{FSM}	35		A
Maximum Instantaneous Forward Voltage at I _F = 1.0 A (Note 1)	V _F	1.1 (T _J = 25°C) 0.8 (T _J = 150°C)		V
Maximum Instantaneous Reverse Current (Note 1) (Rated dc Voltage)	I _R I _{R(H)}	5.0 (T _J = 25°C) 150 (T _J = 150°C)		μA
Thermal Resistance, Junction to Ambient (Note 2)	R _{θJA}	216		°C/W
Maximum Reverse Recovery Time (I _F =1.0A, di/dt = 50A/μs)	T _{rr}	65		ns
Operating Junction Temperature Range	T _J	- 65 to + 175		°C

Notes :

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

RATING AND CHARACTERISTIC CURVES (MURA130, MURA140)

**FIG.1 - CURRENT DERATING, AMBIENT
(FR-4 BOARD WITH MINIMUM PAD)**

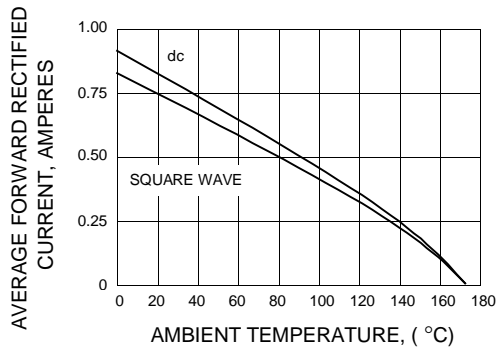
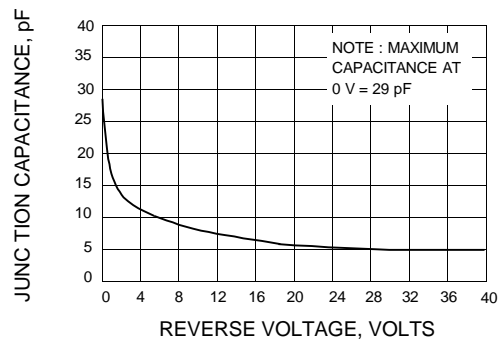


FIG.2 - MAXIMUM JUNCTION CAPACITANCE



**FIG.3 - MAXIMUM INSTANTANEOUS
FORWARD VOLTAGE**

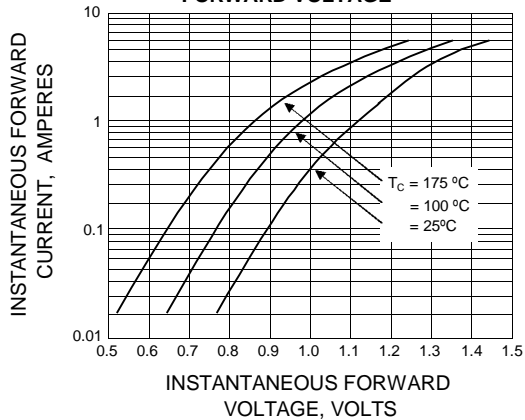


FIG. 4 - MAXIMUM REVERSE CURRENT

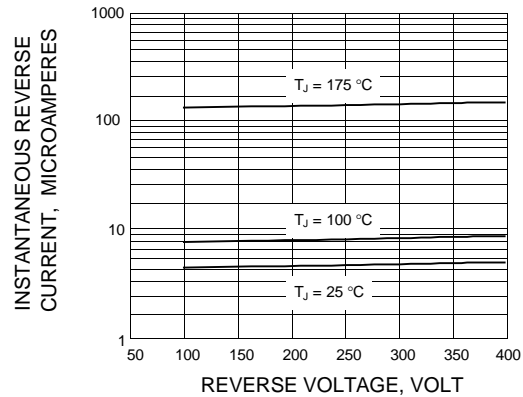


FIG. 5 - POWER DISSIPATION

