

MURA130, MURA140

PRV : 300 - 400 Volts
Io : 1.0 Amperes

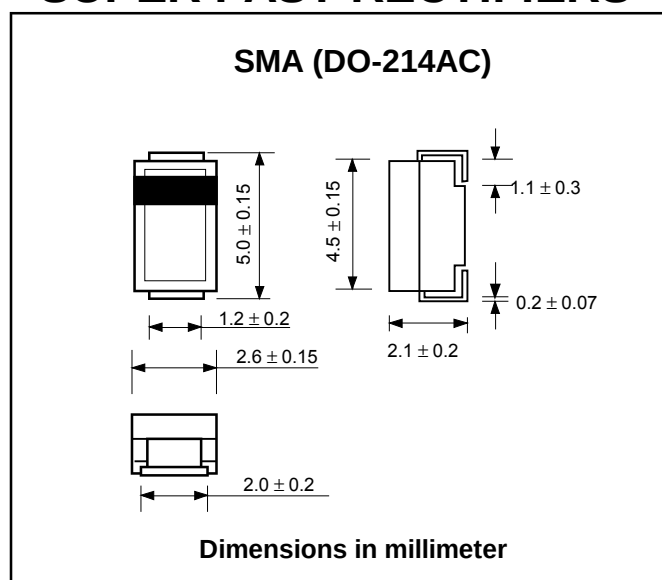
FEATURES :

- * 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

SURFACE MOUNT SUPER FAST RECTIFIERS



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	VRRM	300	400	V
Maximum Working Peak Reverse Voltage	VRWM	300	400	V
Maximum DC Blocking Voltage	VDC	300	400	V
Maximum Average Forward Current @T _L = 150 °C	IF(AV)	1.0		V
Maximum Non-Repetitive Peak Surge Current (Surge Applied at Rate Load Conditions Halfwave, Single Phase, 60 Hz)	IFSM	35		A
Maximum Instantaneous Forward Voltage at IF = 1.0 A (Note 1)	VF	1.1 (TJ = 25°C)		V
		0.8 (TJ = 150°C)		
Maximum Instantaneous Reverse Current (Note 1) (Rated dc Voltage)	IR	5.0 (TJ = 25°C)		μA
	IR(H)	150 (TJ = 150°C)		
Thermal Resistance, Junction to Ambient (Note 2)	RθJA	216		°C/W
Maximum Reverse Recovery Time (IF=1.0A, di/dt = 50A/μs)	Trr	65		ns
Operating Junction Temperature Range	TJ	- 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)**

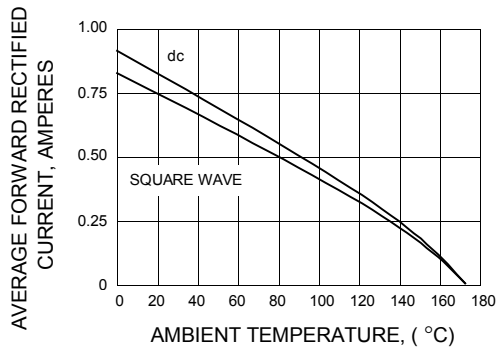
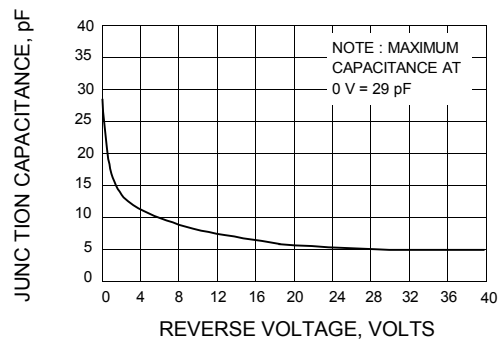


FIG.2 - MAXIMUM JUNCTION CAPACITANCE



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

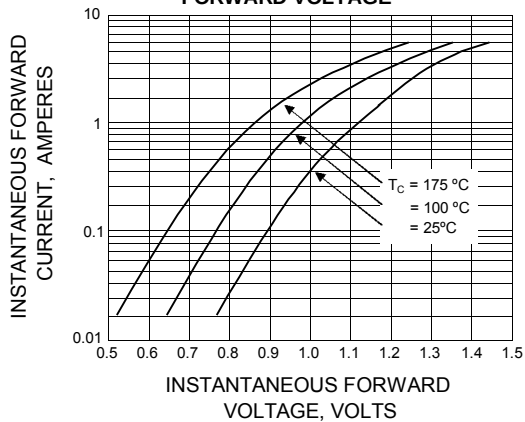


FIG. 4 - MAXIMUM REVERSE CURRENT

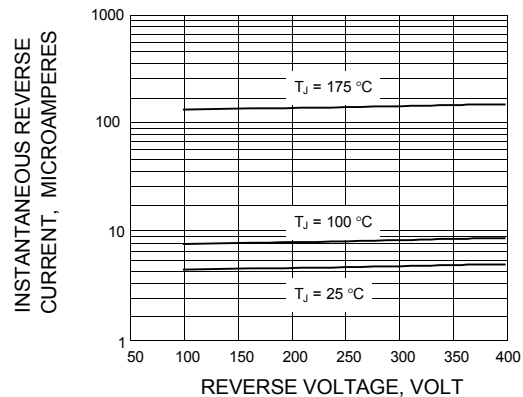


FIG. 5 - POWER DISSIPATION

