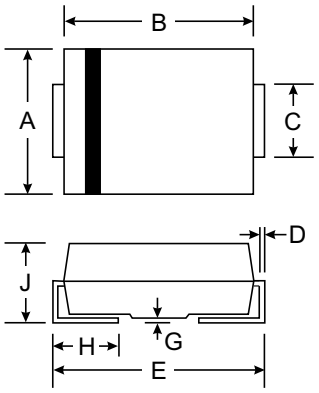
MURA130/MURA140

1.0A Surface Mount High Efficient Rectifier

Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Super fast recovery time
- Pb / RoHS Free



SMA		
Dim	**Min**	**Max**
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

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 T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, 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)		V
		0.8 (T_J = 150°C)		
Maximum Instantaneous Reverse Current (Note 1)	I_R	5.0 (T_J = 25°C)		A
(Rated dc Voltage)	$I_{R(H)}$	150 (T_J = 150°C)		
Thermal Resistance, Junction to Ambient (Note 2)	$R_{\theta JA}$	216		°C/W
Maximum Reverse Recovery Time (I_F=1.0A, di/dt = 50A/μs)	Trr	65		ns
Operating Junction Temperature Range	T_J	- 65 to + 175		°C

Notes :

(1) Pulse Test : Pulse Width = 300 s, 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)

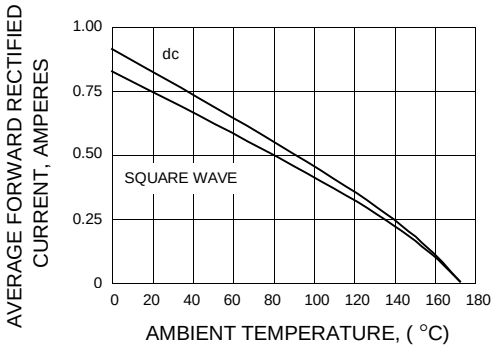


FIG.2 - MAXIMUM JUNCTION CAPACITANCE

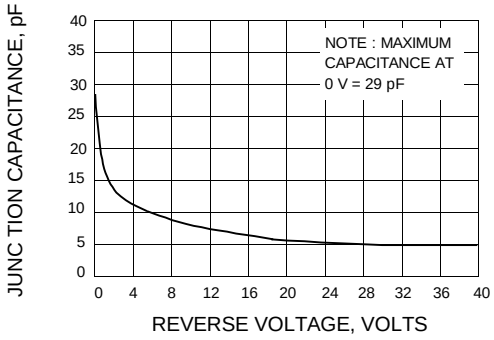


FIG.3 - MAXIMUM INSTANTANEOUS FORWARD VOLTAGE

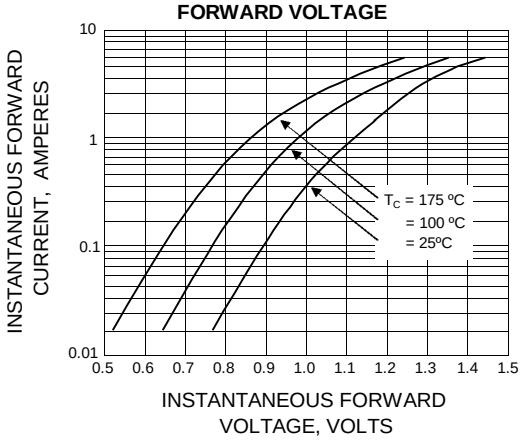


FIG. 4 - MAXIMUM REVERSE CURRENT

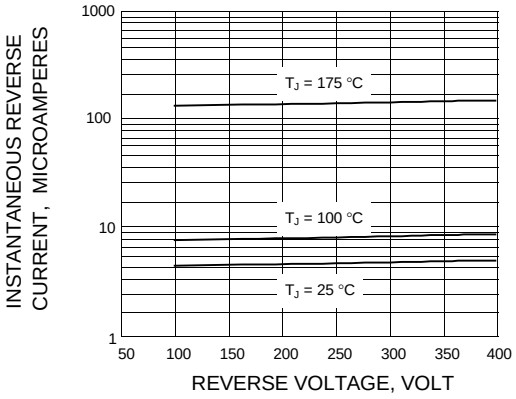


FIG. 5 – POWER DISSIPATION

