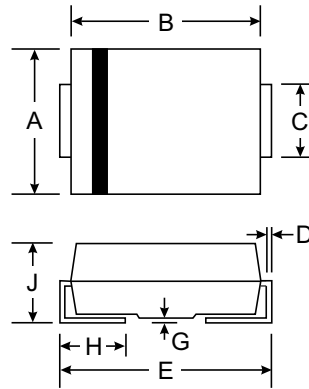


MURA105/MURA110

1.0A Surface Mount Ultra-Fast 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	MURA105	MURA110	UNIT
Maximum Peak Repetitive Reverse Voltage	V _{RRM}	50	100	V
Maximum Working Peak Reverse Voltage	V _{RWM}	50	100	V
Maximum DC Blocking Voltage	V _{DC}	50	100	V
Maximum Average Rectified Forward Current	I _{F(AV)}	1.0 (T _L = 155 °C) 2.0 (T _L = 135 °C)		V
Maximum Non-Repetitive Peak Surge Current (Surge Applied at Rate Load Conditions Halfwave, Single Phase, 60 Hz)	I _{FSM}	50		A
Maximum Instantaneous Forward Voltage at I _F = 1.0 A (Note 1)	V _F	0.875 (T _J = 25°C) 0.66 (T _J = 150°C)		V
Maximum Instantaneous Reverse Current (Note 1) (Rated dc Voltage)	I _R I _{R(H)}	2.0 (T _J = 25°C) 50 (T _J = 150°C)		A
Thermal Resistance, Junction to Lead (Note 2)	R _{θJL}	24		°C/W
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}	30		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 (MURA105, MURA110)

FIG.1 - CURRENT DERATING, LEAD

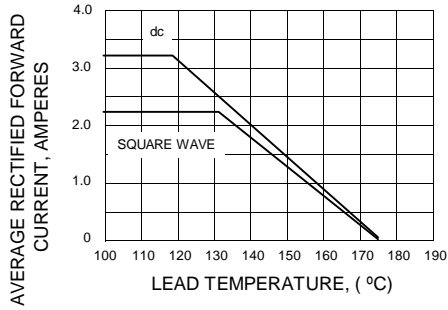


FIG.2 - MAXIMUM CAPACITANCE

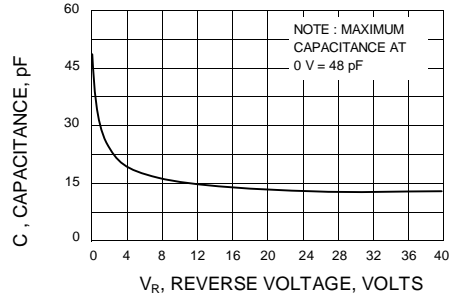


FIG.3 - MAXIMUM INSTANTANEOUS FORWARD VOLTAGE

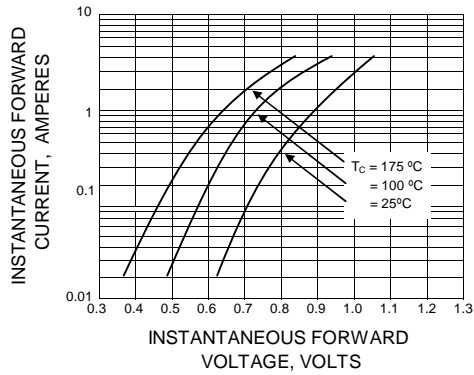


FIG.4 - MAXIMUM REVERSE CURRENT

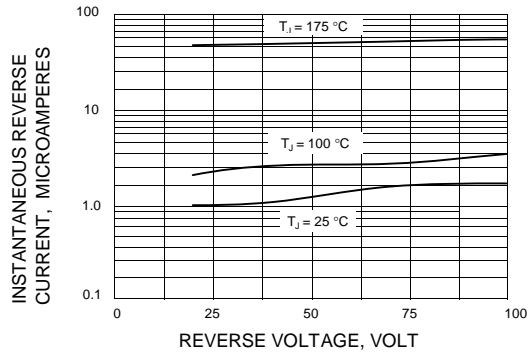


FIG.5 - POWER DISSIPATION

