www.eicsemi.com

MURS105 - MURS115

SURFACE MOUNT ULTRA FAST RECTIFIER

PRV : 50 - 150 Volts
Io : 1.0 Ampere

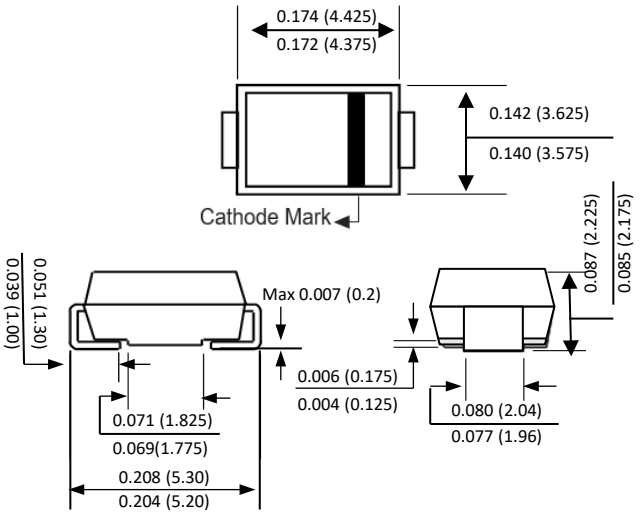
FEATURES :

* 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 : SMB Molded plastic
* Epoxy : UL94V-0 rate flame retardant
* Lead : Lead Formed for Surface Mount
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.108 gram

SMB (DO-214AA)



Dimensions in inches and (millimeters)

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	MURS105	MURS110	MURS115	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	V
Maximum Working Reverse Voltage	V_{RWM}	50	100	150	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	V
Maximum Average Forward Current T_L = 155 °C	$I_{F(AV)}$	1.0			A
Maximum Peak Forward Surge Current (Surge applied at rated load conditions, half wave, single phase, 60Hz)	I_{FSM}	40			A
Maximum Forward Voltage at I_F = 1 A (Note 1)	V_F	0.875			V
Maximum Reverse Current at T_J = 25 °C	I_R	2.0			μA
Rated DC Voltage T_J = 150 °C	$I_{R(H)}$	50			μA
Maximum Reverse Recovery Time (Note 2)	Trr	25			ns
Operating Junction Temperature Range	T_J	- 65 to + 175			°C

Notes :

(1) Pulse Test : Pulse Width = 300 μs, Duty Cycle ≤ 2.0%
(2) Reverse Recovery Test Conditions : I_F = 0.5A, I_R = 1A ; Irr = 0.25 A

RATING AND CHARACTERISTIC CURVES (MURS105 - MURS115)

FIG.1 - CURRENT DERATING, CASE

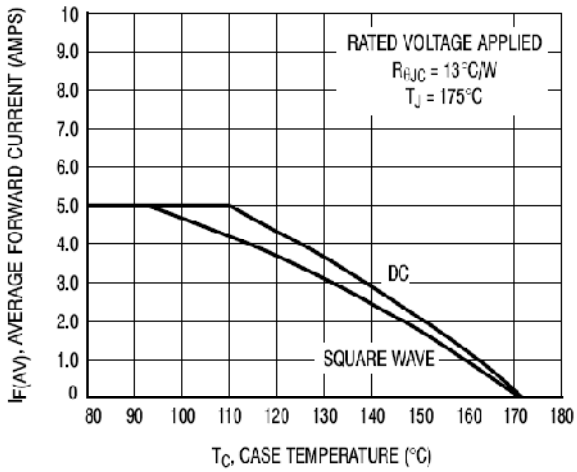


FIG.2 - POWER DISSIPATION

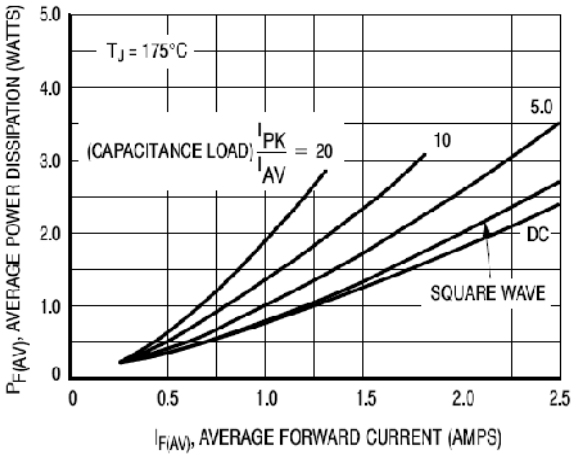


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

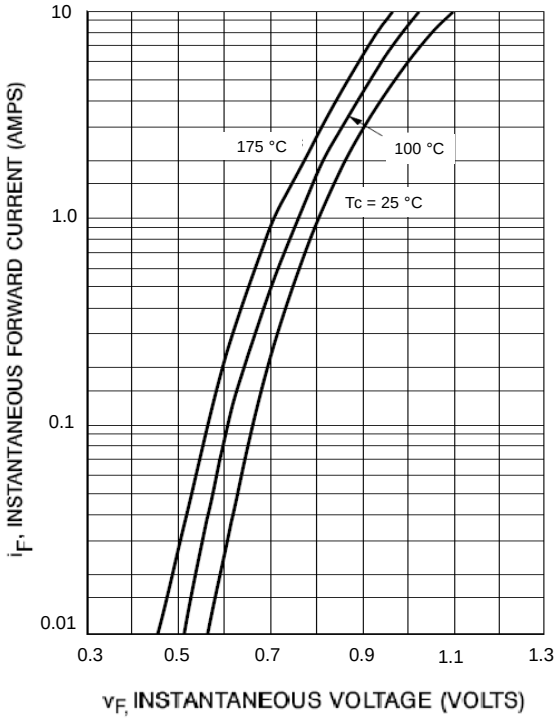


FIG.4 - TYPICAL REVERSE CHARACTERISTICS