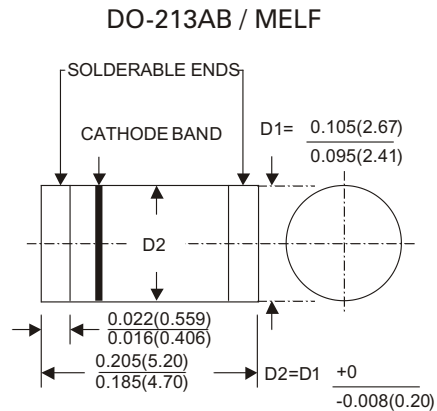


FSM151 thru FSM157

SURFACE MOUNT FAST RECOVERY GLASS PASSIVATED RECTIFIERS



Dimension in inches (millimeters)

FEATURES

- Ideal for surface mounted applications
- Easy pick and place
- Built-in strain relief
- Glass passivated chips

MECHANICAL DATA

Case : Molded plastic use UL94V-0 recognized flame retardant epoxy

Terminals : Plated terminals, solderable per MIL-STD-202, Method 208

Polarity : Red Color band on body denotes cathode

Mounting position : Any

Weight : 0.12grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temp. unless otherwise specified
Single phase, half sine wave, 60Hz, resistive or inductive load
For capacitive load, derate current by 20%

	SYMBOL	FSM151	FSM152	FSM153	FSM154	FSM155	FSM156	FSM157	UNITS
Maximum Current Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_A=55^\circ\text{C}$	$I_{(AV)}$	1.5							Amps
Peak Forward Surge Current Single Sine-Wave on Rated Load (JEDEC Method) $T_A=75^\circ\text{C}$	I_{FSM}	50							Amps
Maximum Instantaneous Forward Voltage Drop at 1.5A DC	V_F	1.3							Volts
Maximum DC Reverse Current $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=125^\circ\text{C}$	I_R	5.0 100							μA
Typical Reverse Recovery Time	T_{RR}	150			250		500		nS
Typical Junction Capacitance	C_J	25							pF
Operating Junction Temperature Range	T_J	-65 to +120							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150							$^\circ\text{C}$

NOTES :

1. Reverse Recovery Test Conditions : $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C

FSM151 thru FSM157

SURFACE MOUNT FAST RECOVERY GLASS PASSIVATED RECTIFIERS

RATING AND CHARACTERISTICS CURVES FSM151 THRU FSM157

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

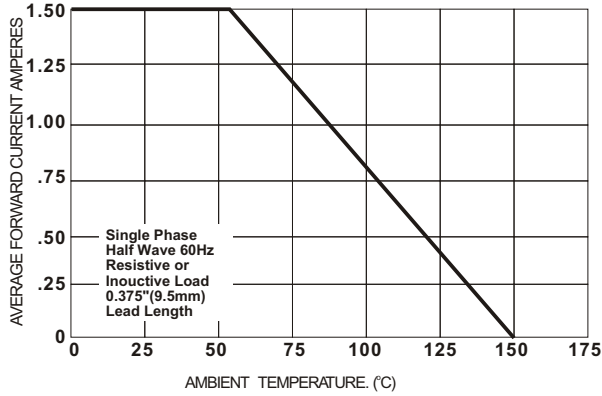


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

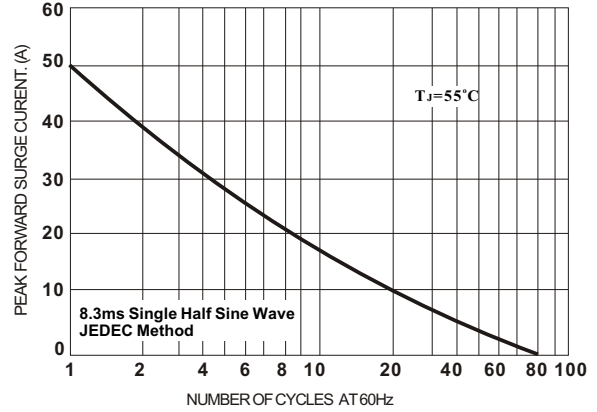


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

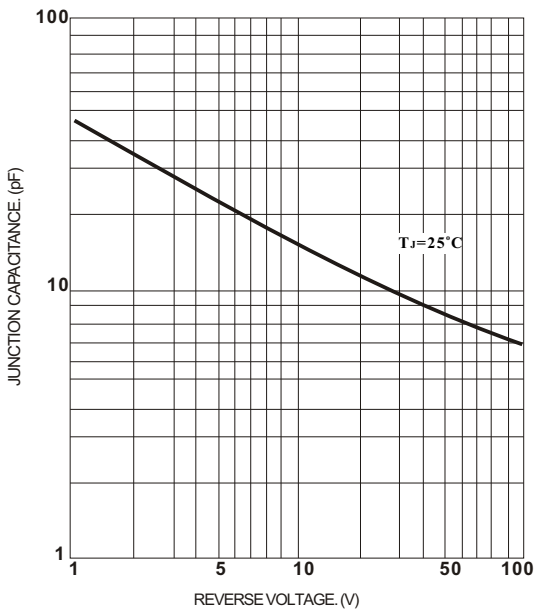


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

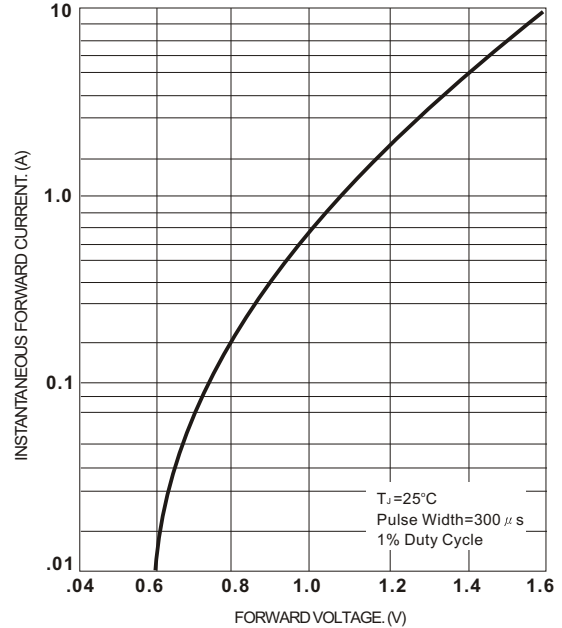
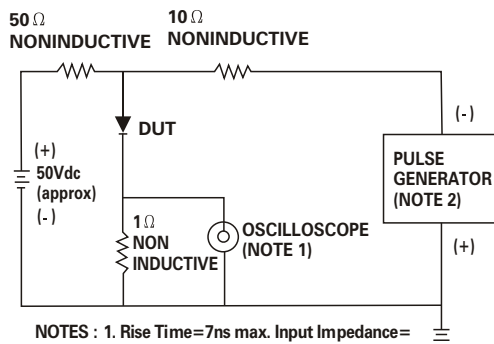


FIG. 5 - EVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



- NOTES : 1. Rise Time = 7ns max. Input Impedance = 1 megohm. 22pF
2. Rise Time = 10ns max. Source Impedance = 50 Ohms.

