

FSM101 THRU FSM106

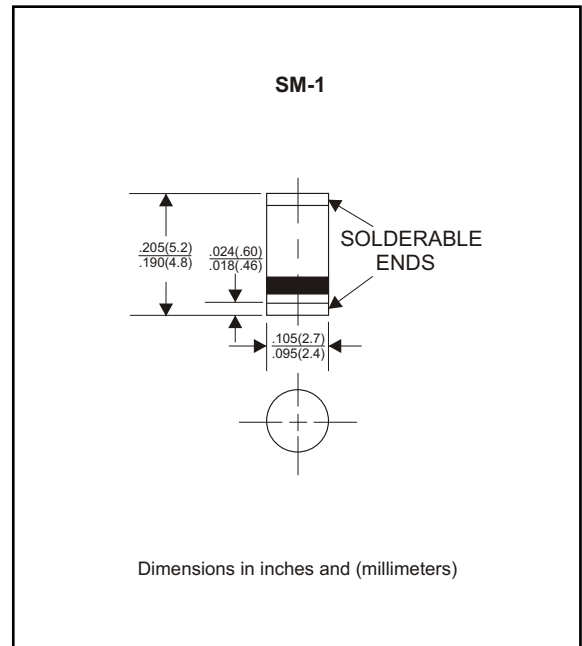
Fast recovery type

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound.
- For surface mounted applications.
- Exceeds environmental standards of MIL-S-19500 / 228
- Low leakage current

Mechanical data

Case : Moulded plastic, SM-1 (MELF)
 Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
 Polarity : Indicated by cathode band
 Mounting Position : Any
 Weight : 0.015 gram



MAXIMUM RATINGS (AT T_A=25°C unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I _O			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I _{FSM}			30	A
Reverse current	V _R = V _{RRM} T _A = 25°C	I _R			5.0	uA
	V _R = V _{RRM} T _A = 100°C				100	uA
Thermal resistance	Junction to ambient	R _{JA}		75		°C / w
Diode junction capacitance	f=1MHz and applied 4vDC reverse voltage	C _J		15		pF
Storage temperature		T _{STG}	-55		+175	°C

SYMBOLS	MARKING CODE	V _{RRM} *1 (V)	V _{RMS} *2 (V)	V _R *3 (V)	V _F *4 (V)	T _{RR} *5 (nS)	Operating temperature (°C)
FSM101	-	50	35	50	1.3	150	-55 to +175
FSM102	-	100	70	100			
FSM103	-	200	140	200			
FSM104	-	400	280	400		250	
FSM105	-	600	420	600			
FSM106	-	800	560	800			

- *1 Repetitive peak reverse voltage
- *2 RMS voltage
- *3 Continuous reverse voltage
- *4 Maximum forward voltage
- *5 Reverse recovery time

RATING AND CHARACTERISTIC CURVES (FSM101 THRU FSM106)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

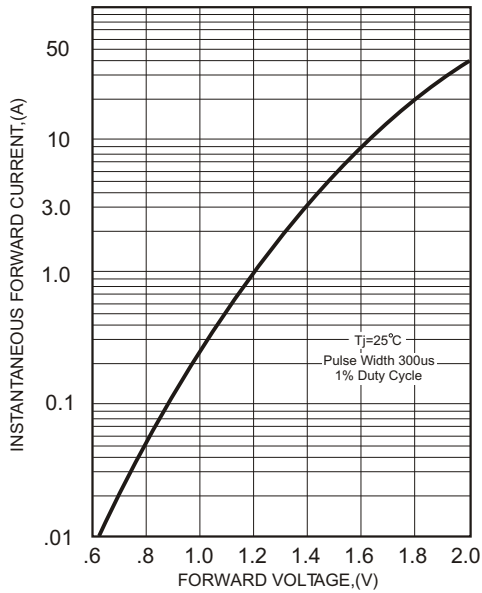


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

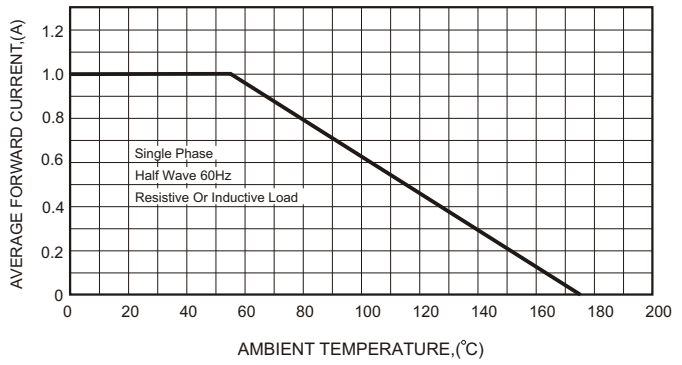
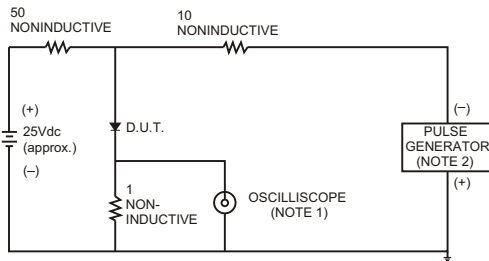


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

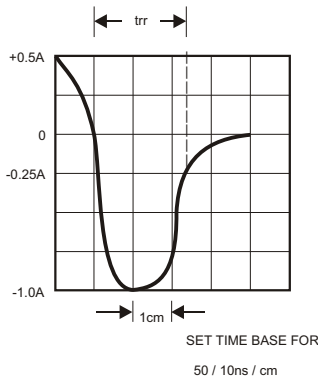


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

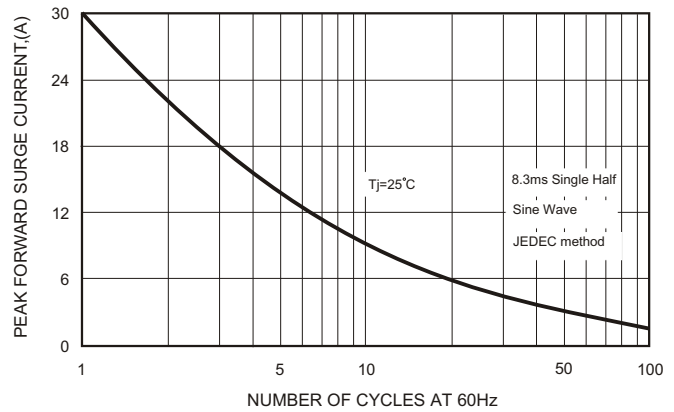


FIG.5-TYPICAL JUNCTION CAPACITANCE

