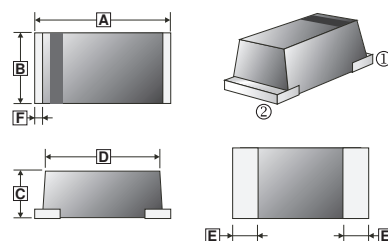


RoHS Compliant Product
A suffix of "-C" specifies halogen-free and RoHS Compliant

DESCRIPTIONS

- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- Small plastic SMD package.
- High surge and high current capability.
- Superfast recovery time for switching mode application.
- Glass-passivated chip junction.

SOD-123MH



MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL94-V0 rate flame retardant
- Weight: 0.0110 g (approximately)

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	3.30	3.70	D	3.10 (MAX.)	
B	1.40	1.80	E	0.80 (TYP.)	
C	0.60	1.00	F	0.30 (TYP.)	

MARKING CODE

Part Number	Marking	Part Number	Marking
SUF11MH	S4	SUF16MH	S6
SUF12MH	S4	SUF18MH	S8
SUF14MH	S4		

PACKAGING INFORMATION

Package	MPQ	Leader Size
SOD-123MH	3K	7 inch

ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameters		Symbol	Part Number					Unit
			SUF11 MH	SUF12 MH	SUF14 MH	SUF16 MH	SUF18 MH	
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	50	100	200	400	600	V
Maximum RMS Voltage		V _{RMS}	35	70	140	280	420	V
Maximum Reverse Voltage		V _R	50	100	200	400	600	V
Maximum Forward Voltage @ I _F =1A		V _F	0.95			1.25	1.70	V
Maximum Average Forward Rectified Current @ T _A =50℃		I _O	1					A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	25					A
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25℃	I _R	5					μA
	T _A =100℃		100					
Reverse Recovery Time		T _{rr}	35					nS
Typical Thermal Resistance Junction to Ambient		R _{θJA}	42					℃/W
Typical Junction Capacitance		C _J	10					pF
Storage and Operating Temperature Range		T _{STG} , T _J	-65 ~ 175, -55 ~ 150					℃

Note:

1. f=1MHz and applied 4V DC reverse voltage

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

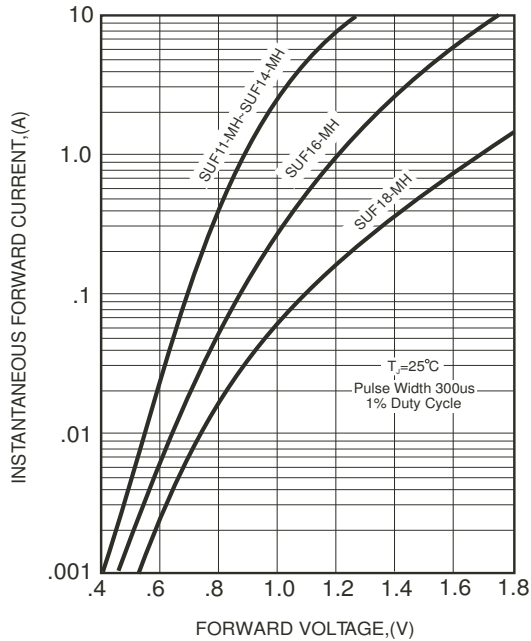


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

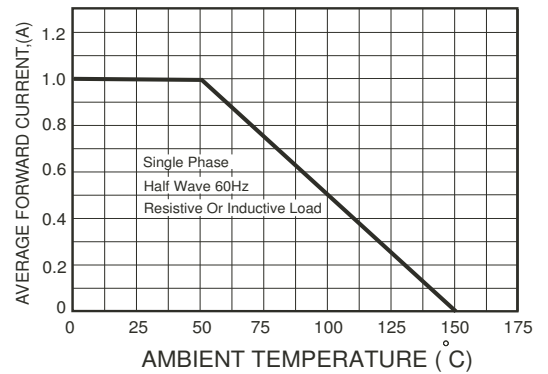
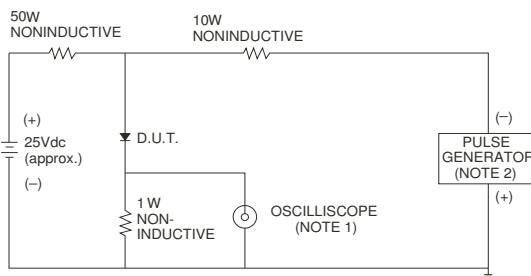


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

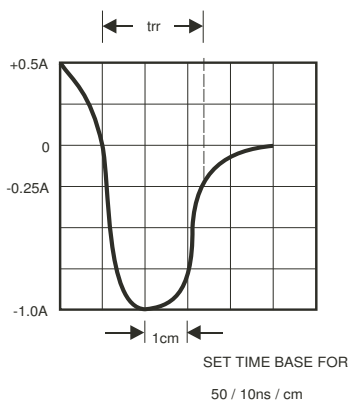


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

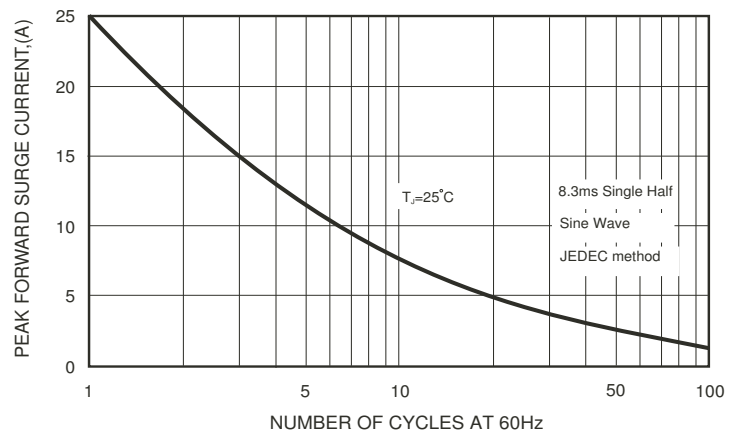


FIG.5-TYPICAL JUNCTION CAPACITANCE

