

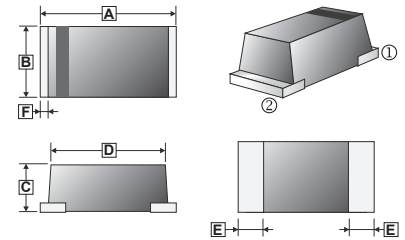
RoHS Compliant Product

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

FEATURES

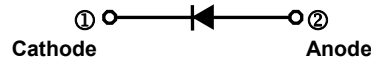
- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application. in order to optimize board space.
- Low power loss and low forward voltage drop
- High surge, high current capability, and high efficiency.
- Fast switching for high efficiency.
- Guard-ring for overvoltage protection.
- Ultra high-speed switching
- Silicon epitaxial planar chip, metal silicon junction.

SOD-123MH



PACKAGING INFORMATION

- Small plastic SMD package.
- 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 Code	Part Number	Marking Code
SM220MH	22	SM260MH	26
SM230MH	23	SM280MH	28
SM240MH	24	SM2100MH	20
SM250MH	25		

MAXIMUM RATINGS (T_a = 25°C unless otherwise specified.)

PARAMETERS	SYMBOL	PART NUMBERS							UNITS	TESTING CONDITIONS
		SM 220 MH	SM 230 MH	SM 240 MH	SM 250 MH	SM 260 MH	SM 280 MH	SM 2100 MH		
Recurrent Peak Reverse Voltage (Max.)	V _{RRM}	20	30	40	50	60	80	100	V	
RMS Voltage (Max.)	V _{RMS}	14	21	28	35	42	56	70	V	
Reverse Voltage (Max.)	V _R	20	30	40	50	60	80	100	V	
Forward Voltage (Max.)	V _F	0.50		0.70		0.85			V	
Forward Rectified Current (Max.)	I _O	2.0							A	See Fig.1
Peak Forward Surge Current	I _{FSM}	40							A	8.3ms single half sine-wave superimposed on rated load (JEDEC method)
Reverse Current (Max.)	I _R	0.5							mA	V _R =V _{RRM} , T _a =25°C
		10								V _R =V _{RRM} , T _a =125°C
Thermal Resistance (Typ.)	R _{θJA}	85							°C/W	Junction to ambient
Diode Junction Capacitance (Typ.)	C _J	160							pF	f=1MHz and applied 4V DC reverse voltage
Storage and Operating Temperature Range	T _{STG} , T _J	-65 ~ 175, -55 to 125			-65 ~ 175, -55 to 150				°C	

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

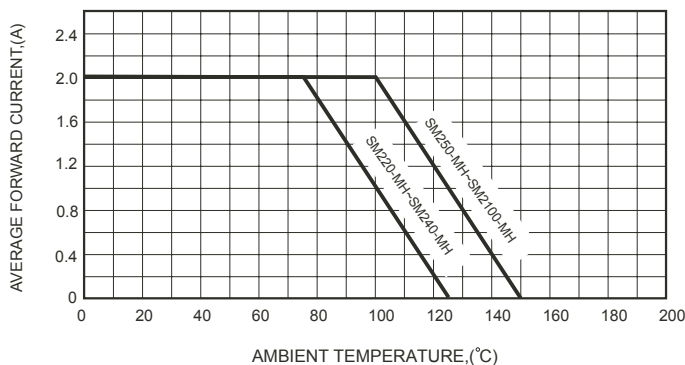


FIG.2-TYPICAL FORWARD CHARACTERISTICS

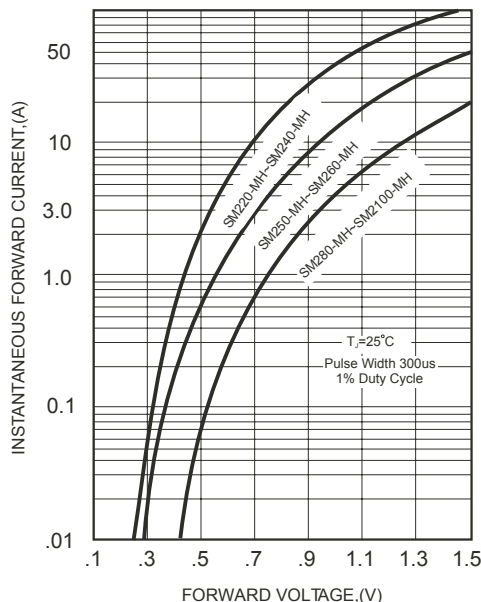


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

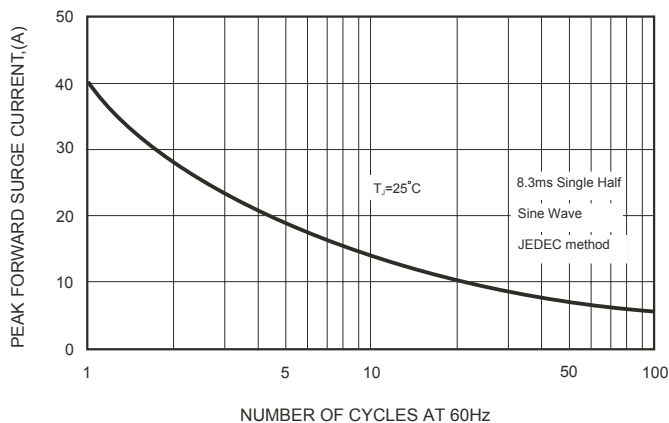


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

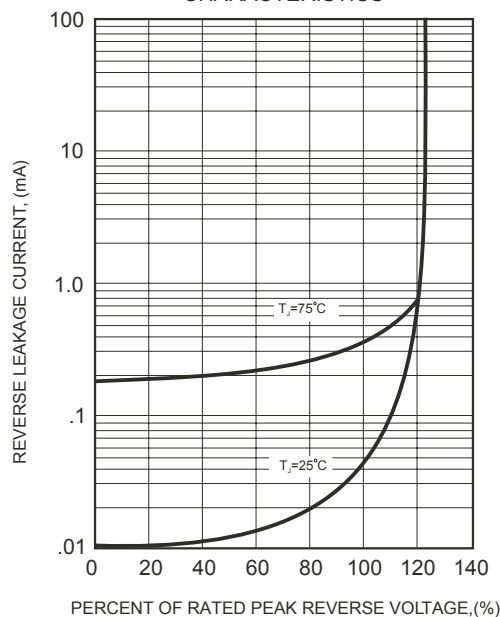


FIG.4-TYPICAL JUNCTION CAPACITANCE

