

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

FEATURES

- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- Guarding for overvoltage protection
- Ultra high-speed switching
- Silicon epitaxial planar chip, metal silicon junction
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

MECHANICAL DATA

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, SOD-123HT
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any

MARKING

Product	SM2150HT	SM2200HT
Marking	215	220

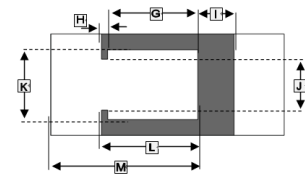
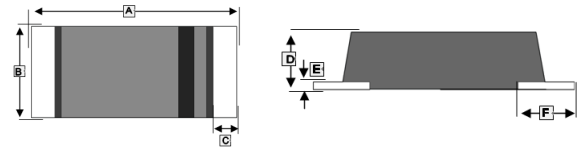
PACKAGE INFORMATION

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

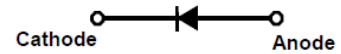
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Part Number		Unit
		SM2150HT	SM2200HT	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	150	200	V
Maximum RMS Voltage	V _{RMS}	105	140	V
Continuous reverse voltage	V _R	150	200	V
Maximum Instantaneous Forward Voltage @ I _F =2.0A	V _F	0.9	0.92	V
Maximum Average Forward Rectified Current, See Fig.1	I _O	2		A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	50		A
Maximum Reverse Current	I _R	T _J =25°C	0.2	mA
		T _J =100°C	10	
Typical Junction Capacitance f=1MHz and applied 4V DC reverse voltage	C _J	160		pF
Thermal resistance	Junction to ambient	R _{θJA}	72	°C / W
	Junction to case	R _{θJC}	36	°C / W
Operating Temperature	T _J	-55~150		°C
Storage Temperature	T _{STG}	-65~175		°C

SOD-123HT



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	3.3	3.7	H	0.6 TYP.	
B	1.4	1.8	I	0.6	0.8
C	0.3 TYP.		J	0.75	0.85
D	0.6	1.0	K	1.0	1.2
E	0.1 TYP.		L	1.1	1.3
F	0.8 TYP.		M	1.9	2.1
G	1.0	1.2			



CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

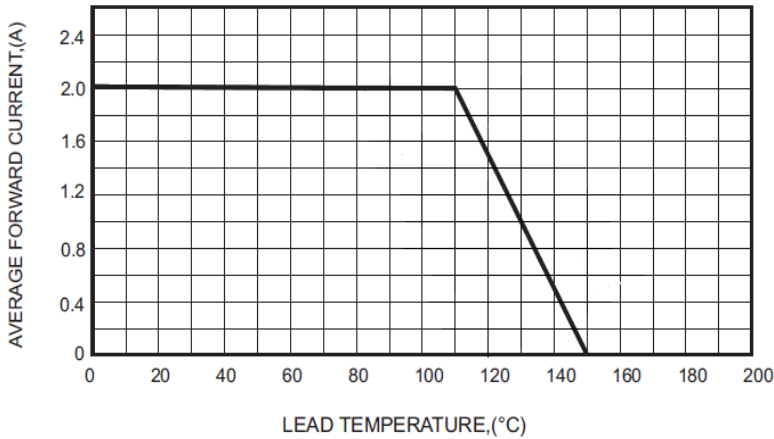


FIG.2-TYPICAL FORWARD CHARACTERISTICS

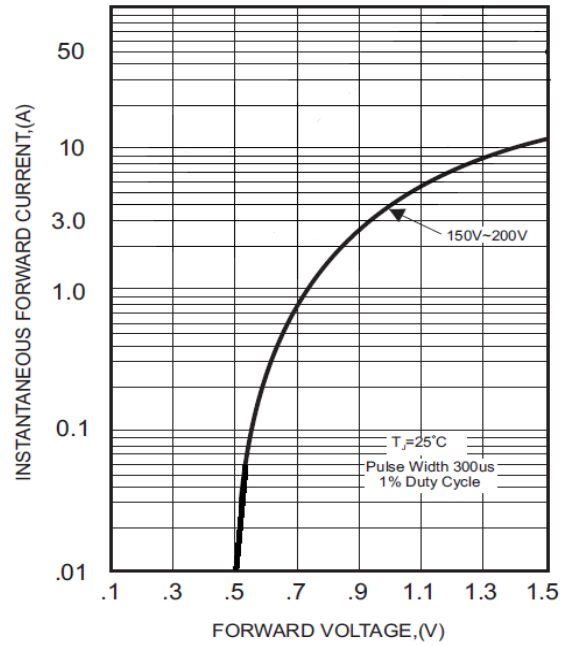


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

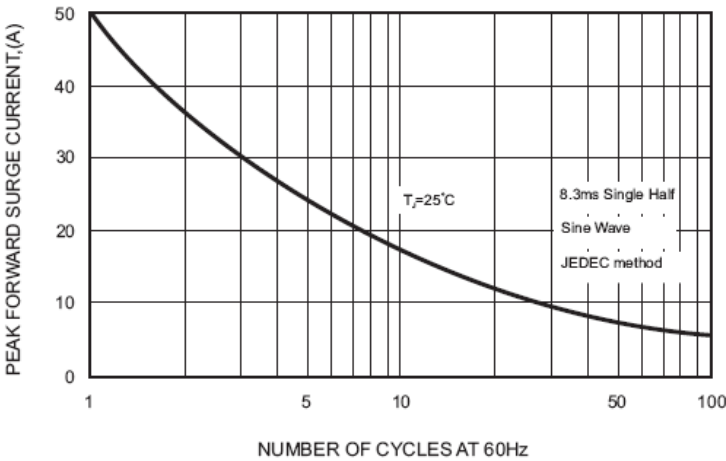


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

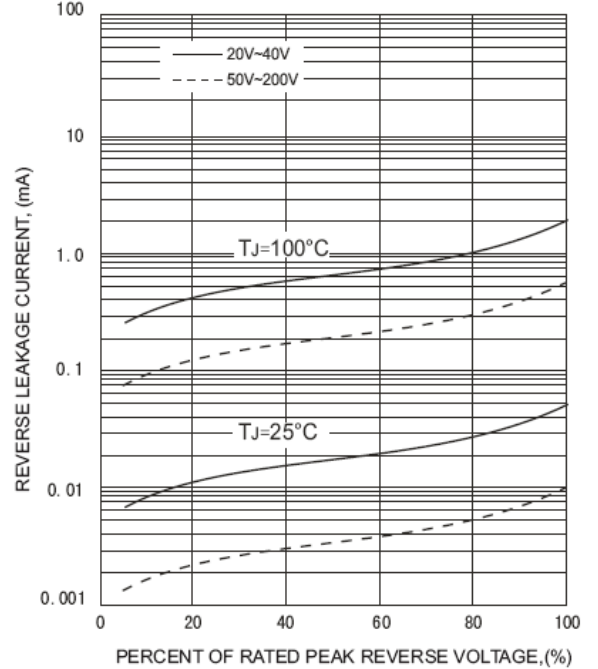


FIG.4-TYPICAL JUNCTION CAPACITANCE

