

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

FEATURES

- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering: 250°C for 10 Seconds at Terminals
- Low Forward Voltage

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Solderable Per MIL-STD-202, Method 208 Guaranteed
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any

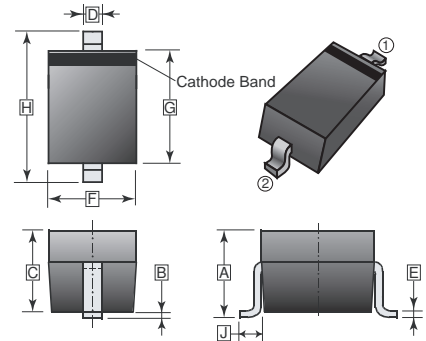
MARKING

BT

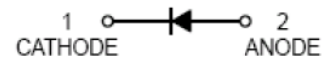
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123	3K	7 inch

SOD-123



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.94	1.35	F	1.40	1.80
B	0.10 REF.		G	2.54	2.85
C	1.00	1.30	H	3.55	3.86
D	0.30	0.78	J	0.50 REF.	
E	0.08	0.25			



ORDER INFORMATION

Part Number	Type
SCS05100P-C	Lead (Pb)-free and Halogen-free

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

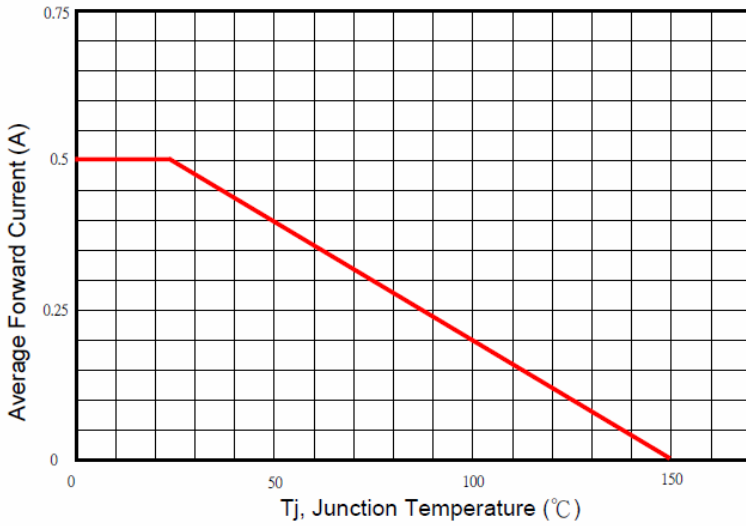
Parameter	Symbol	Ratings	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	100	V
Working Peak Reverse Voltage	V _{RWM}	100	V
Maximum DC Blocking Voltage	V _R	100	V
Average Forward Current @T _J =25°C	I _{F(AV)}	0.5	A
Peak Forward Current @8.3ms Half Sine	I _{FSM}	10	A
Maximum Instantaneous Forward Voltage @I _{FM} =0.5A	V _F	T _A =25°C	0.75
		T _A =125°C	0.6
Maximum DC Reverse Current @Rated DC Blocking Voltage	I _R	T _J =25°C	30
		T _J =125°C	1
Typical Junction Capacitance ¹	C _J	100	pF
Typical Thermal Resistance from Junction-Ambient ²	R _{θJA}	310	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55~150	°C

Notes:

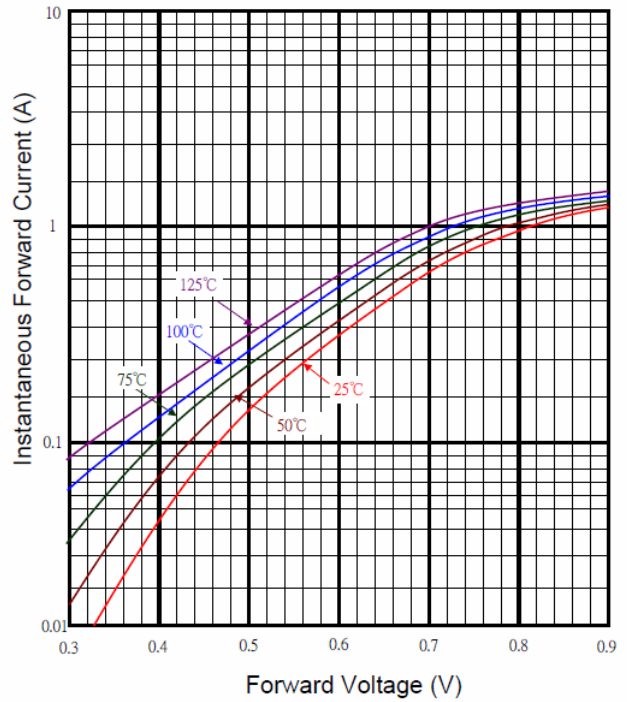
1. Measured at 1MHZ and applied reverse of 0V DC.
2. FR-4 PCB, 2oz. 0.7mmx1.2mm copper pad.

RATINGS AND CHARACTERISTIC CURVES

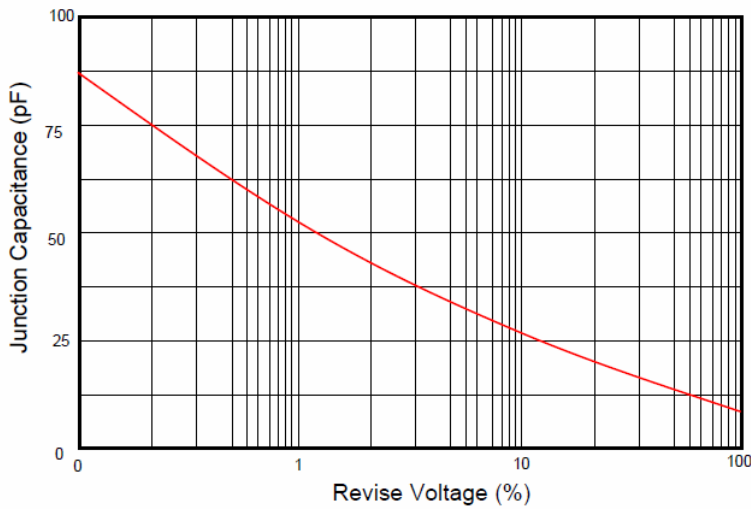
Typical Forward Current Derating Curve



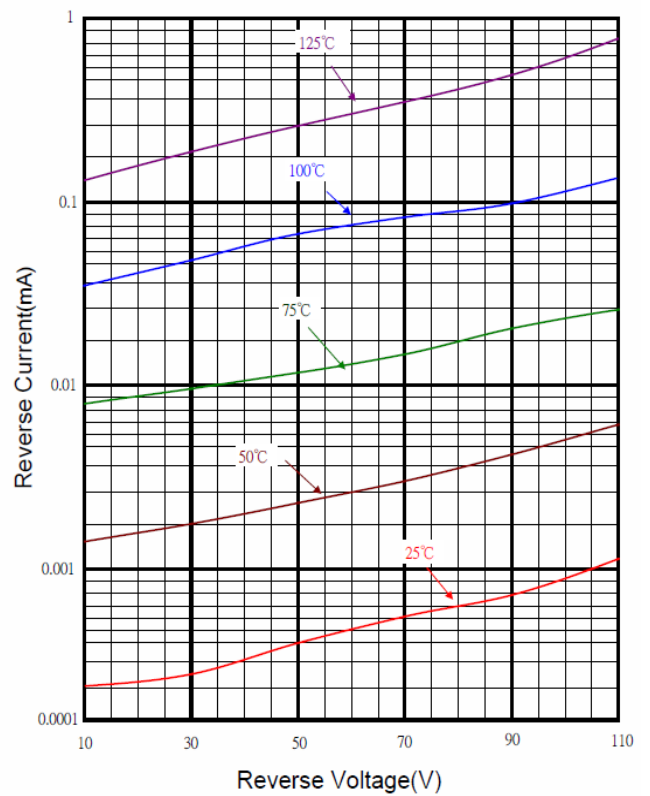
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

