

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

FEATURES

- Guard Ring Protection
- Low Forward Voltage Drop
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters

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

SM

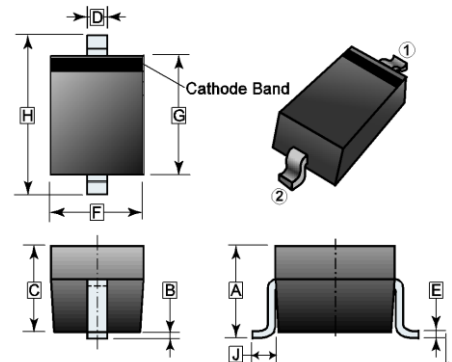
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-323	3K	7 inch

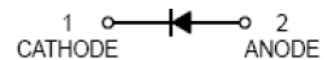
ORDER INFORMATION

Part Number	Type
SCS160V-C	Lead (Pb)-free and Halogen-free

SOD-323



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.05 REF.		F	1.10	1.50
B	0.07 REF.		G	1.50	1.95
C	0.80	1.10	H	2.30	2.80
D	0.25	0.40	J	0.475 REF.	
E	0.05	0.25			



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

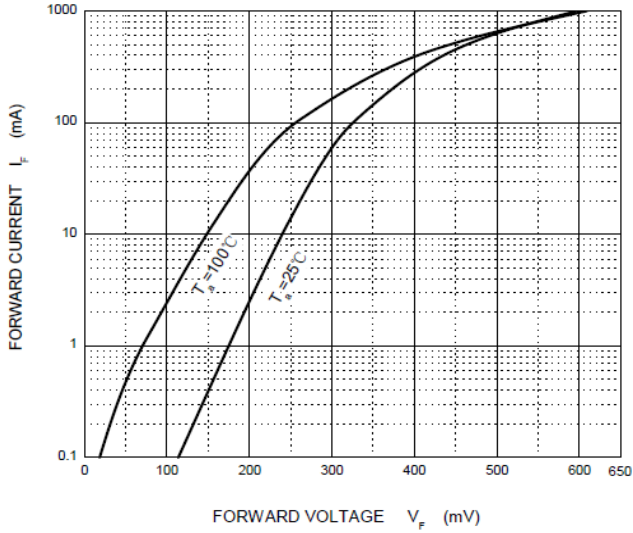
Parameter	Symbol	Ratings	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	60	V
Maximum RMS Voltage	V _{RMS}	42	V
Maximum DC Blocking Voltage	V _{DC}	60	V
Average Forward Current	I _F	1	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	10	A
Total Power Dissipation	P _{TOT}	250	mW
Thermal Resistance Junction-Ambient	R _{θJA}	400	°C/W
Operating Junction Temperature Range	T _J	-40~125	°C
Storage Temperature Range	T _{STG}	-55~150	

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

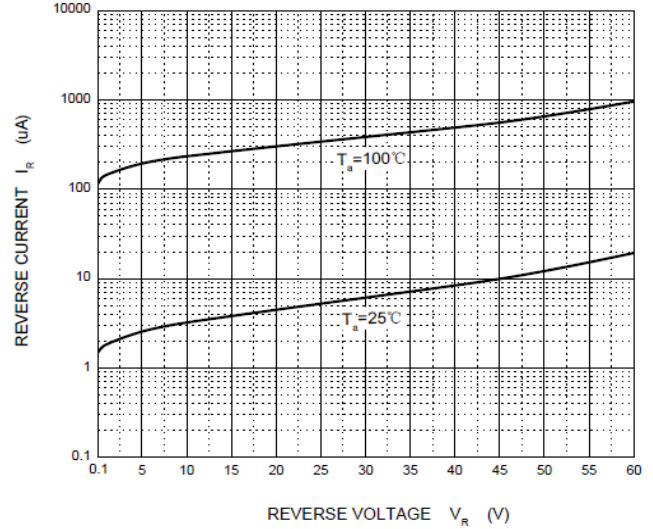
Parameter	Symbol	Typ.	Max.	Unit	Test Conditions
Maximum Instantaneous Forward Voltage	V _F	-	0.7	V	I _F =1A
Maximum DC Reverse Current @Rated DC Blocking Voltage	I _R	-	0.1	mA	V _R =60V
Typical Junction Capacitance	C _J	35	-	pF	V _R =4V, f=1MHz

RATINGS AND CHARACTERISTIC CURVES

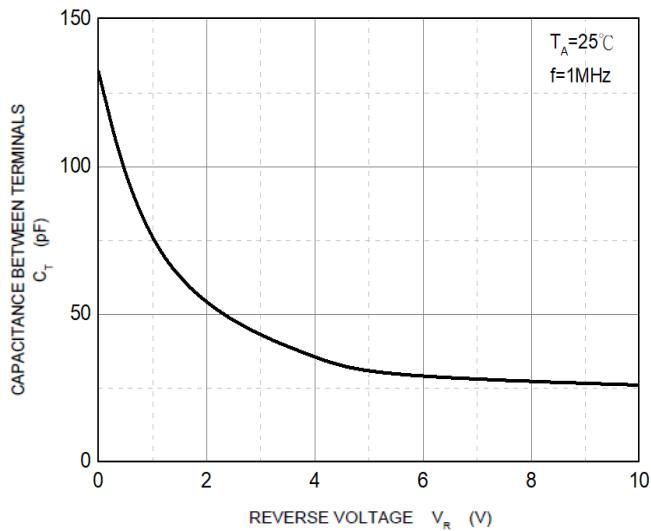
Forward Characteristics



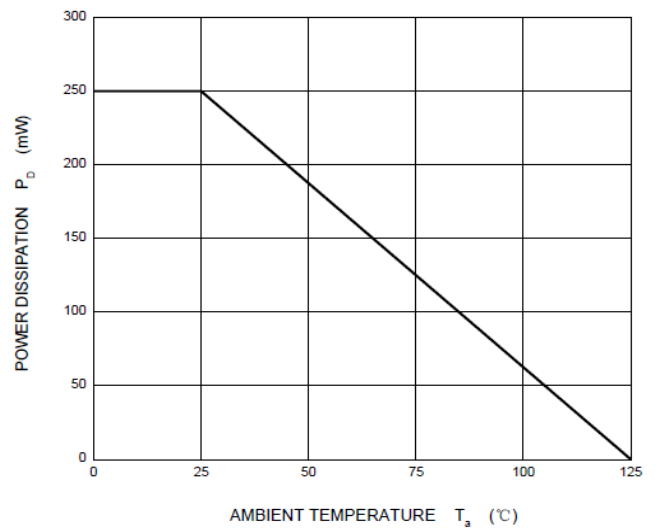
Reverse Characteristics



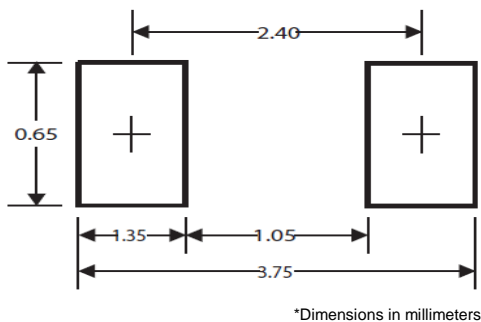
Capacitance Characteristics



Power Derating Curve



Mounting Pad Layout



*Dimensions in millimeters