

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

### DESCRIPTION

- Epitaxial Planar Silicon Diode

### FEATURES

- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance

### APPLICATIONS

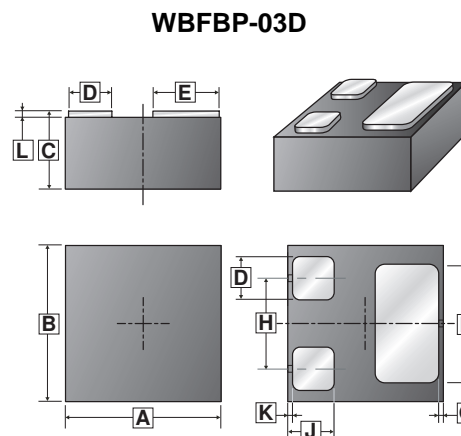
- High Conductance Ultra Fast Diode
- For Portable Equipment: (i.e. Mobile Phone, MP3, MD, CD-ROM, DVD-ROM, Note Book PC, etc.)

### MARKING

A2

### PACKAGE INFORMATION

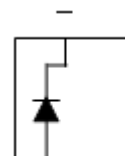
Package	MPQ	Leader Size
WBFBP-03D	5K	7 inch



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.950	1.050	G	-	0.050
B	0.950	1.050	H	0.510	0.610
C	0.010	0.070	J	0.250	0.350
D	0.210	0.310	K	-	0.050
E	0.350 REF.		L	0.450	0.550
F	0.680 REF.				

### ORDER INFORMATION

Part Number	Type
SCS4148DSTL-C	Lead (Pb)-free and Halogen-free



+ NC  
TOP VIEW

### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise specified)

Parameters	Symbol	Ratings	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	75	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	75	V
DC Blocking Voltage	V <sub>R</sub>	75	V
Non-Repetitive Peak reverse voltage	V <sub>RM</sub>	100	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	53	V
Forward Continuous Current	I <sub>FM</sub>	300	mA
Average Rectified Output Current	I <sub>O</sub>	150	mA
Non-Repetitive Peak Forward Surge Current	t=1μs	2	A
	t=1s	1	
Power Dissipation	P <sub>D</sub>	100	mW
Thermal Resistance, Junction-Ambient	R <sub>θJA</sub>	1250	°C/W
Operating Junction and Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	125, -55~150	°C

**ELECTRICAL CHARACTERISTICS** ( $T_A=25^\circ\text{C}$  unless otherwise specified)

Parameters	Symbol	Min.	Max.	Unit	Test Conditions
Forward Voltage	$V_{F1}$	-	0.715	V	$I_F=1\text{mA}$
	$V_{F2}$	-	0.855	V	$I_F=10\text{mA}$
	$V_{F3}$	-	1	V	$I_F=50\text{mA}$
	$V_{F4}$	-	1.25	V	$I_F=150\text{mA}$
Maximum DC Reverse Current @ Rated DC Blocking Voltage	$I_{R1}$	-	1	$\mu\text{A}$	$V_R=75\text{V}$
	$I_{R2}$	-	25	nA	$V_R=20\text{V}$
Capacitance Between Terminals	$C_T$	-	2	pF	$V_R=0, f=1\text{MHz}$
Maximum Reverse Recovery Time	$T_{RR}$	-	4	nS	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1I_R, R_L=100\Omega$

**CHARACTERISTIC CURVES**

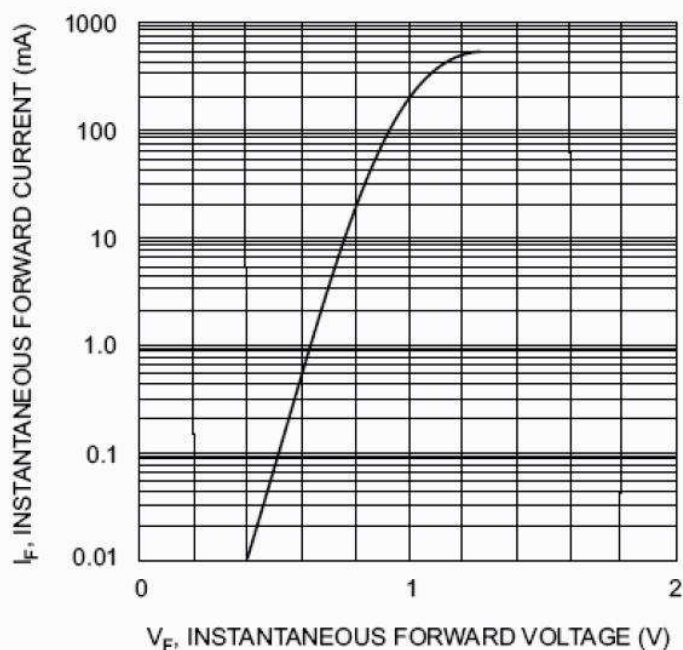


Fig. 1 Forward Characteristics

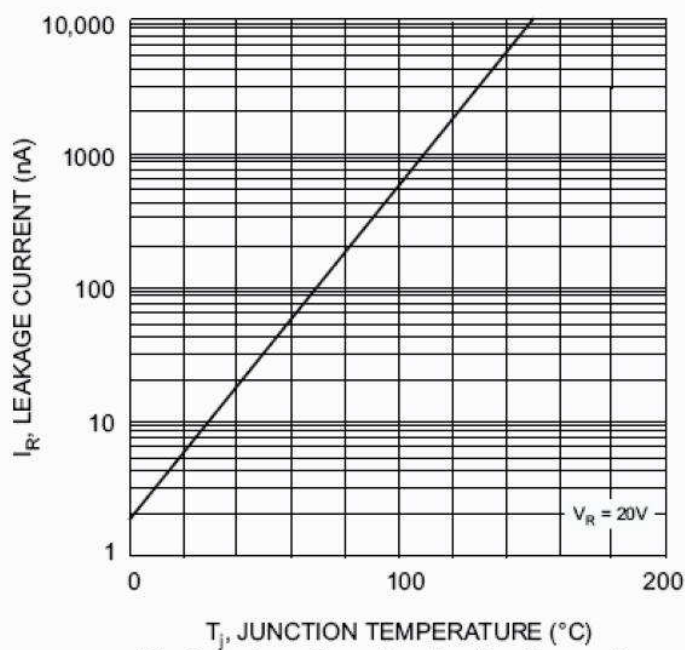


Fig. 2 Leakage Current vs Junction Temperature