

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

DESCRIPTION

- Epitaxial Planar Silicon Diode

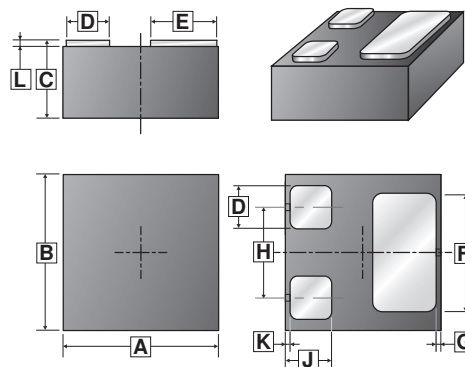
FEATURES

- 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.)

WBFBP-03D



MARKING

A3

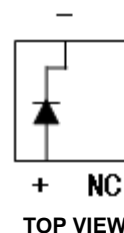
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.950	1.050	G	-	0.050
B	0.950	1.050	H	0.510	0.610
C	0.010	0.070	J	0.250	0.350
D	0.210	0.310	K	-	0.050
E	0.350	REF.	L	0.450	0.550
F	0.680	REF.			

PACKAGE INFORMATION

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

ORDER INFORMATION

Part Number	Type
SCS4448DSTL-C	Lead (Pb)-free and Halogen-free



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

Parameters	Symbol	Ratings	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	80	V
Working Peak Reverse Voltage	V _{RWM}	80	V
DC Blocking Voltage	V _R	80	V
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
RMS Reverse Voltage	V _{R(RMS)}	57	V
Forward Continuous Current	I _{FM}	500	mA
Average Rectified Output Current	I _O	250	mA
Non-Repetitive Peak Forward Surge Current	t=1μs	4	A
	t=1s	2	
Power Dissipation	P _D	100	mW
Thermal Resistance, Junction-Ambient	R _{θJA}	1250	°C/W
Storage Temperature	T _{STG}	-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}	0.62	0.72	V	$I_F=5\text{mA}$
	V_{F2}	-	0.855	V	$I_F=10\text{mA}$
	V_{F3}	-	1	V	$I_F=100\text{mA}$
	V_{F4}	-	1.25	V	$I_F=150\text{mA}$
Maximum DC Reverse Current @ Rated DC Blocking Voltage	I_{R1}	-	0.1	μA	$V_R=70\text{V}$
	I_{R2}	-	25	nA	$V_R=20\text{V}$
Reverse Breakdown Voltage	V_R	80	-	V	$I_R=2.5\mu\text{A}$
Capacitance Between Terminals	C_T	-	3.5	pF	$V_R=6\text{V}, f=1\text{MHz}$
Maximum Reverse Recovery Time	T_{RR}	-	4	nS	$V_R=6\text{V}, I_F=5\text{mA}$

CHARACTERISTIC CURVES

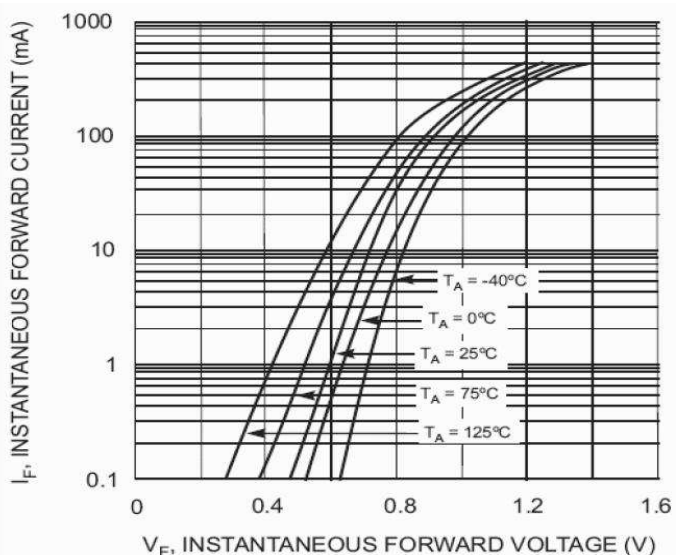


Fig. 1 Typical Forward Characteristics

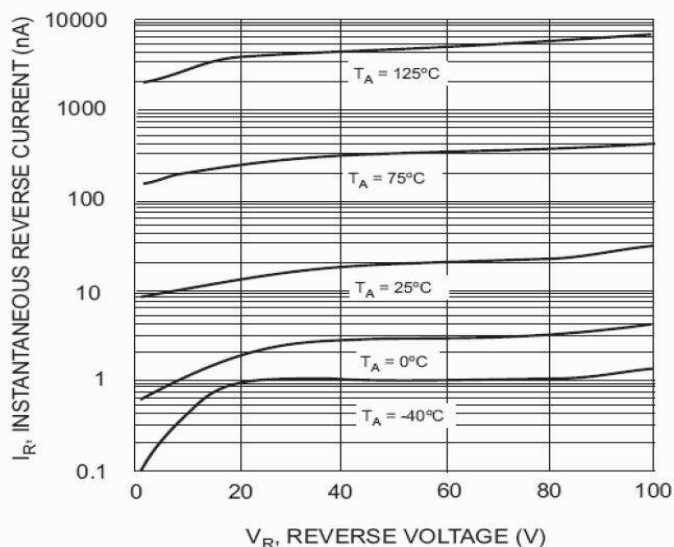


Fig. 2 Typical Reverse Characteristics

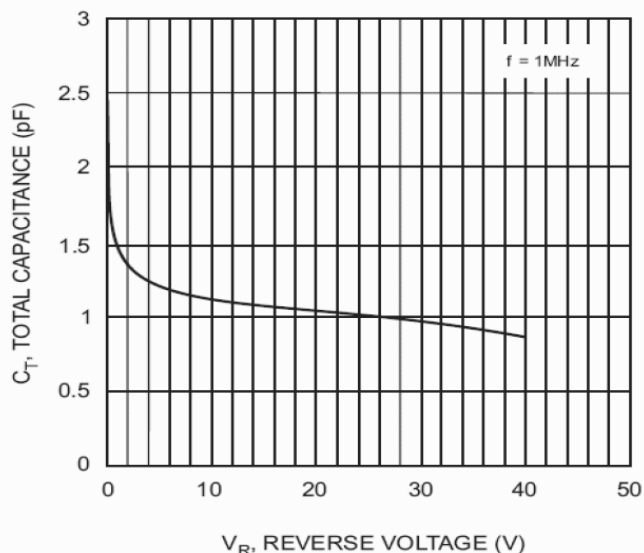


Fig. 3 Typical Capacitance vs. Reverse Voltage

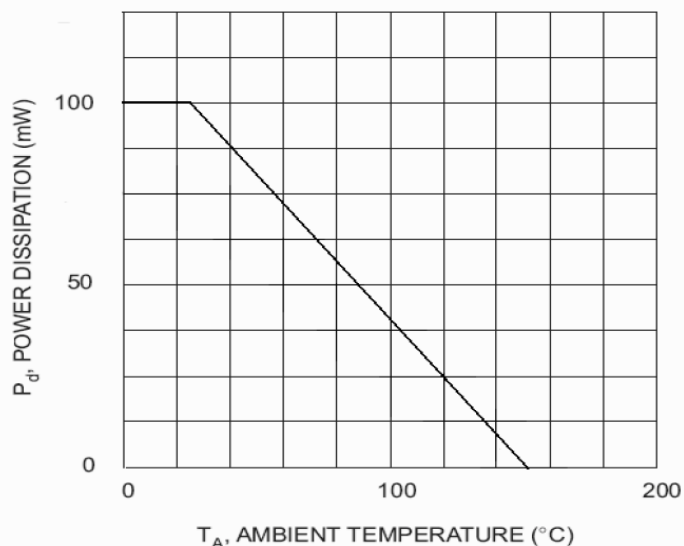


Fig. 4 Power Derating Curve, Total Package