

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

DESCRIPTION

- Epitaxial Planar Silicon Diode

FEATURES

- High Speed. ($T_{RR}=1.5\text{ns}$ Typ.)
- Suitable for High Packing Density Layout
- High Reliability

APPLICATIONS

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

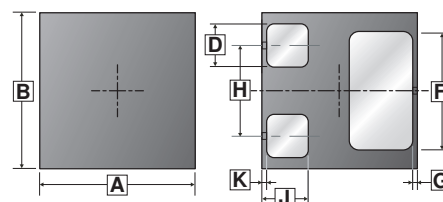
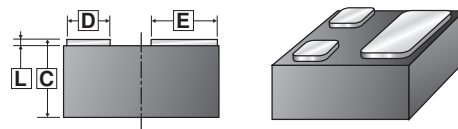
MARKING

N

PACKAGE INFORMATION

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

WBFBP-03D

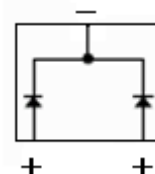


REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.950	1.050	G	-	0.050
B	0.950	1.050	H	0.510	0.610
C	0.010	0.070	J	0.250	0.350
D	0.210	0.310	K	-	0.050
E	0.350 REF.		L	0.450	0.550
F	0.680 REF.				

ORDER INFORMATION

Part Number	Type
SCS222DSTL-C	Lead (Pb)-free and Halogen-free

TOP VIEW



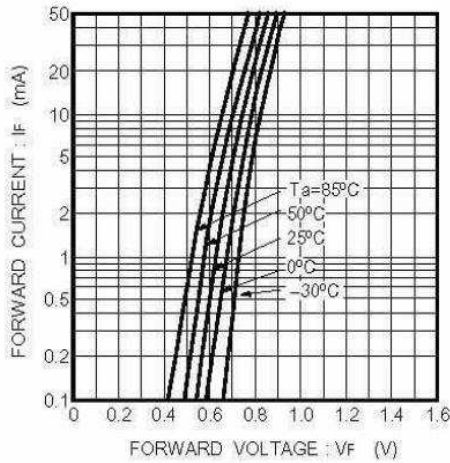
ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameters	Symbol	Ratings	Unit
Peak Repetitive Reverse Voltage	V_{RM}	80	V
DC Reverse Voltage	V_R	80	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	100	mA
Power Dissipation	P_D	100	mW
Operating Junction and Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

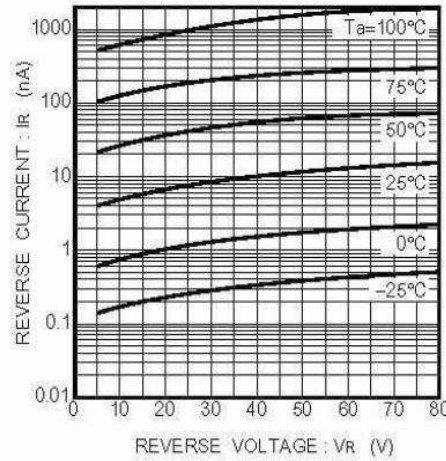
ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameters	Symbol	Min.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	80	-	V	$I_R=100\mu\text{A}$
Maximum DC Reverse Current @ Rated DC Blocking Voltage	I_R	-	0.1	μA	$V_R=70\text{V}$
Forward Voltage	V_F	-	1.2	V	$I_F=100\text{mA}$
Diode Capacitance	C_D	-	3.5	pF	$V_R=6\text{V}, f=1\text{MHz}$
Maximum Reverse Recovery Time	T_{RR}	-	4	nS	$V_R=6\text{V}, I_F=5\text{mA}$

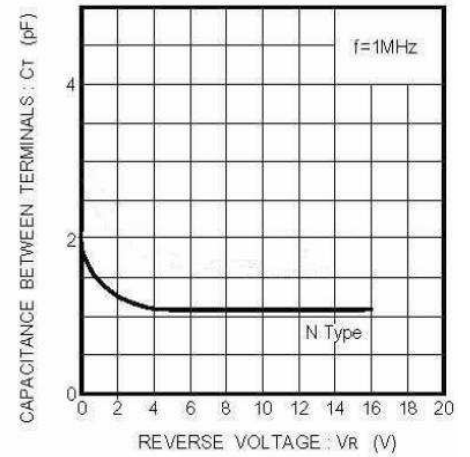
CHARACTERISTIC CURVES



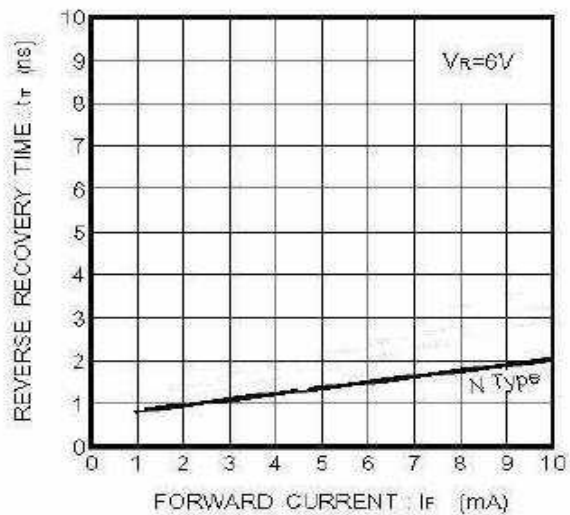
Forward characteristics



Reverse characteristics



Capacitance between terminals characteristics



Reverse recovery time

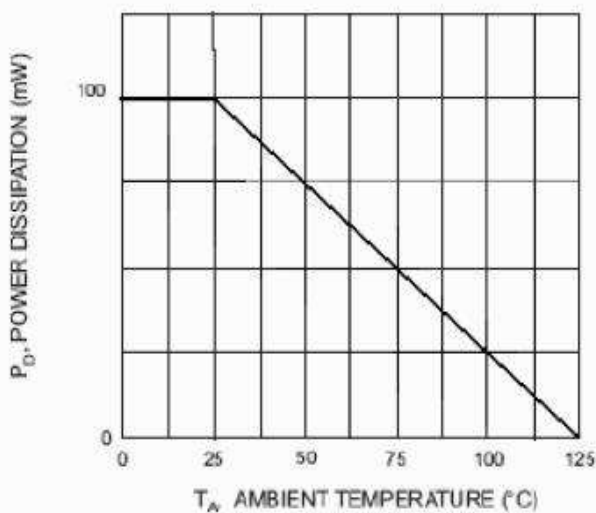
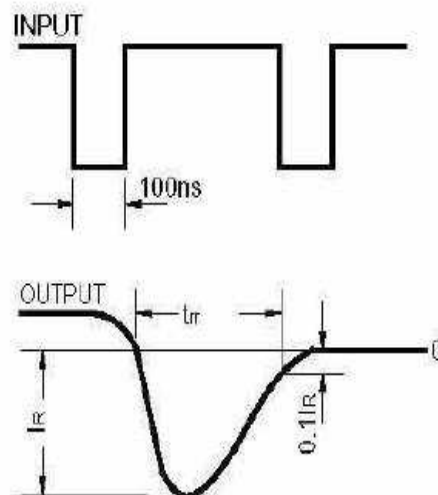
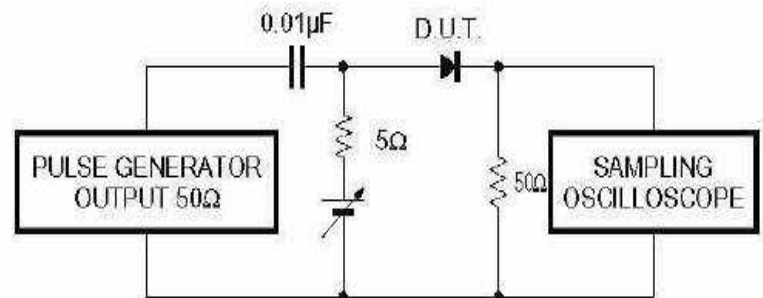


Fig. 1 Power Derating Curve



Reverse recovery time (t_r) measurement circuit