

RoHS Compliant Product

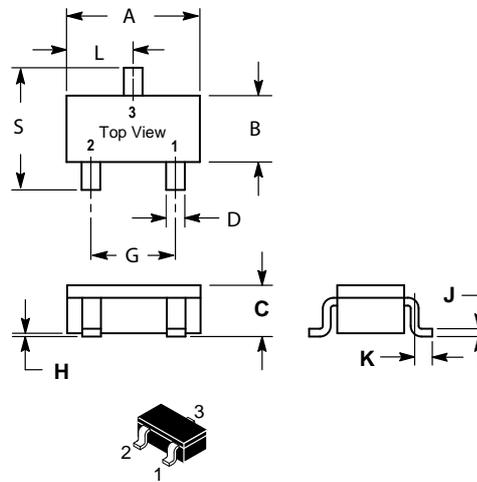
A suffix of "-C" specifies halogen & lead-free

**FEATURES**

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection

**MECHANICAL DATA**

- Case: SOT-346, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams Below
- Weight: 0.008 grams (approx.)
- Mounting Position: Any



SC-59		
Dim	Min	Max
A	2.70	3.10
B	1.30	1.70
C	1.00	1.30
D	0.35	0.50
G	1.70	2.30
H	0.00	0.10
J	0.10	0.26
K	0.20	0.60
L	1.25	1.65
S	2.25	3.00
All Dimension in mm		



SCS420D Marking : D3B

**●Absolute maximum ratings (Ta=25°C)**

Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	40	V
DC reverse voltage	$V_R$	40	V
Mean rectifying current	$I_o$	0.1	A
Peak forward surge current*	$I_{FSM}$	1	A
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-40~+125	°C

\* 60Hz for 1 ms

**●Electrical characteristics (Ta=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.45	V	$I_F=10mA$
Reverse current	$I_R$	-	-	1	$\mu A$	$V_R=10V$
Capacitance between terminals	$C_T$	-	6.0	-	pF	$V_R=10V, f=1MHz$

Note) ESD sensitive product handling required.

RATING AND CHARACTERISTIC CURVES (SCS420D)

● Electrical characteristic curves (Ta=25°C)

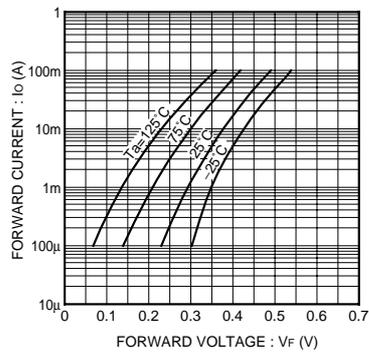


Fig.1 Forward characteristics

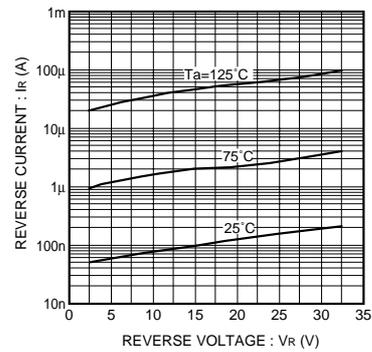


Fig.2 Reverse characteristics

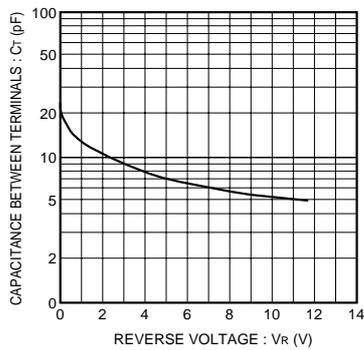


Fig.3 Capacitance between terminals characteristics

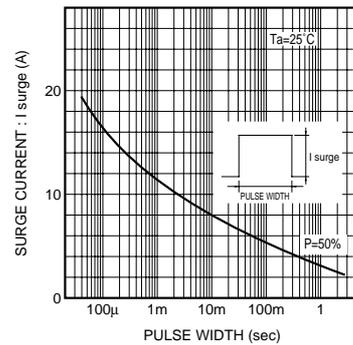


Fig.4 Surge current characteristics

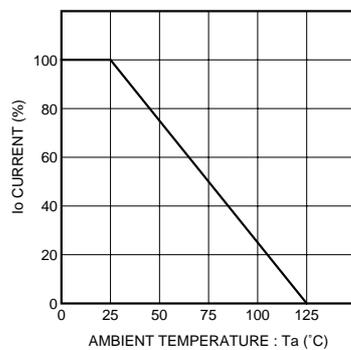


Fig.5 Derating curve (mounting on glass epoxy PCBs)