

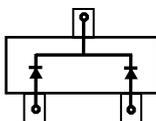
RoHS Compliant Product  
A suffix of "-C" specifies halogen and lead free

## FEATURES

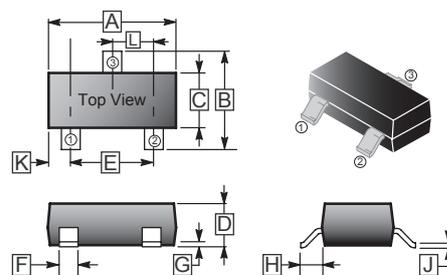
- Ultra high speed switching
- High reliability
- Suitable for high packaging density layout
- Fast reverse recovery time :  $t_{rr} = 1.5\text{ns}$  (typ.)
- Construction: silicon epitaxial planar

## PACKAGING INFORMATION

- Four types of packaging are available
- Weight: 0.0078 g (Approx.)



## SOT-323



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.00	2.20	F	0.20	0.40
B	2.15	2.45	G	-	-
C	1.15	1.35	H	0.525	REF.
D	0.90	1.10	J	0.08	0.15
E	1.20	1.40			

## MARKING CODE

**N** , **A3**

## ABSOLUTE MAXIMUM RATINGS (each diode)

Parameter	Symbol	Ratings	Unit
Peak Reverse Voltage	$V_{RM}$	80	V
DC Reverse Voltage	$V_R$	80	V
Maximum (Peak) Forward Current	$I_{FM}$	300	mA
Average Forward Current	$I_O$	100	mA
Surge Current 1 $\mu$ S	$I_{SURGE}$	4	A
Total Power Dissipation	$P_D$	200	mW
Junction, Storage Temperature	$T_J, T_{STG}$	+150, -55 ~ +150	$^{\circ}\text{C}$

## ELECTRICAL CHARACTERISTICS (at $T_a = 25^{\circ}\text{C}$ unless otherwise specified)(each diode)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Forward Voltage	$V_F$	-	-	1.2	V	$I_F = 100\text{ mA}$
Reverse Voltage Leakage Current	$I_R$	-	-	0.1	$\mu\text{A}$	$V_R = 70\text{V}$
Diode Capacitance	$C_T$	-	-	3.5	pF	$V_R = 6\text{ V}, f = 1\text{ MHz}$
Reverse Recovery Time	$T_{RR}$	-	-	4.0	nS	$V_R = 6\text{ V}, I_F = 5\text{ mA}$

Notes: 1. FR-5 = 1.0 X 0.75 X 0.062 in.  
2. Alumina = 0.4 X 0.3 X 0.024 in. 99.5% alumina.

**CHARACTERISTIC CURVES**

**SCS202NF**

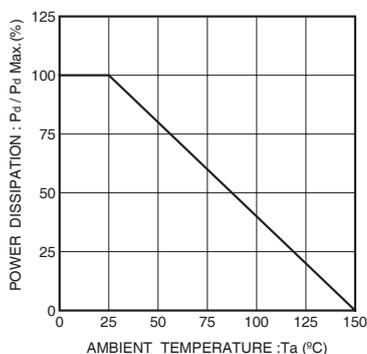


Fig.1 Power attenuation curve

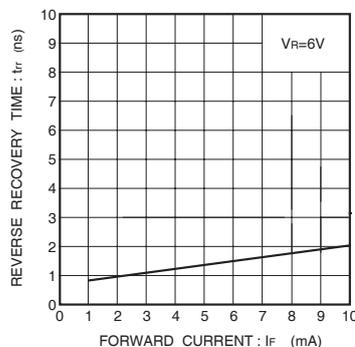


Fig.2 Reverse recovery time

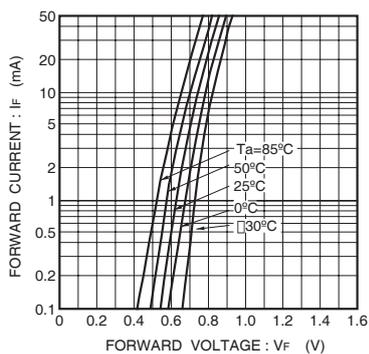


Fig.3 Forward characteristics

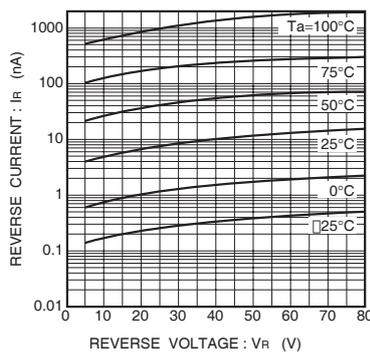


Fig.4 Reverse characteristics

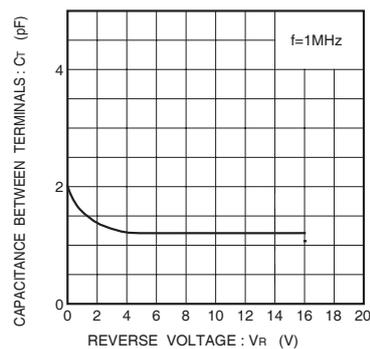


Fig.5 Capacitance between terminals characteristics

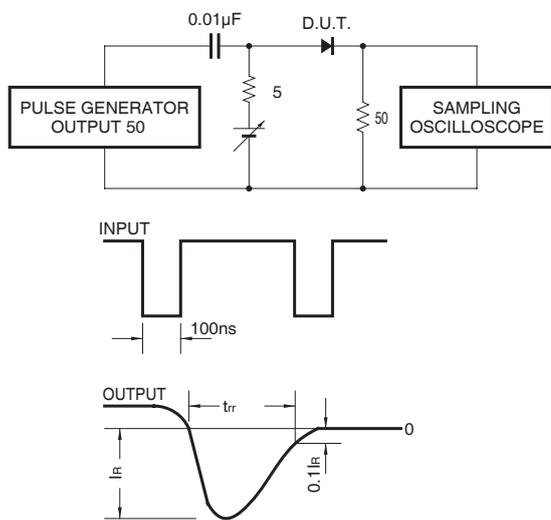


Fig.6 Reverse recovery time ( $t_{rr}$ ) measurement circuit