

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

FEATURES

- Fast switching speed Max:4ns.
- High conductance.
- Connected in series.
- Surface mount package ideally suited for automatic insertion.

APPLICATIONS

- High-speed switching in thick and thin-film circuits.

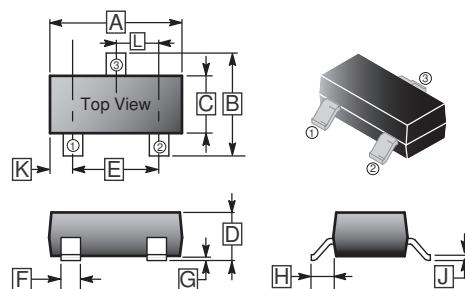
MARKING

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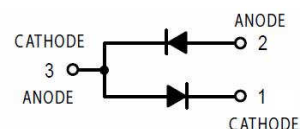
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

SOT-23



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.04	G	-	0.18
B	2.10	2.80	H	0.40	0.60
C	1.20	1.60	J	0.08	0.20
D	0.89	1.40	K	0.6 REF.	
E	1.78	2.04	L	0.85	1.15
F	0.30	0.50			



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

Parameter	Symbol	Value	Unit
Reverse voltage	V _R	70	V
Forward current	I _F	215	mA
Peak forward surge current	I _{FM}	500	mA
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	70	V
Maximum Average Forward Rectified Current	I _{F(AV)}	715	mA
Repetitive Peak Reverse current	I _{FRM}	450	mA
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	t=1.0µs	2.0
		t=1.0ms	1.0
		t=1.0s	0.5
Power dissipation	P _d	225	mW
Typical Thermal Resistance	R _{θJA}	556	°C / W
Operating and storage temperature range	T _J , T _{STG}	-65~150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	-	V	$I_R=2.5\mu\text{A}$
Forward Voltage	V_{F1}	-	-	0.715	V	$I_F=1\text{mA}$
	V_{F2}	-	-	0.855		$I_F=10\text{mA}$
	V_{F3}	-	-	1		$I_F=50\text{mA}$
	V_{F4}	-	-	1.25		$I_F=150\text{mA}$
Reverse Voltage Leakage Current	I_{R1}	-	-	0.025	μA	$V_R=20\text{V}$
	I_{R2}	-	-	2.5		$V_R=75\text{V}$
	I_{R3}	-	-	30		$V_R=25\text{V } T_J=150^\circ\text{C}$
	I_{R4}	-	-	50		$V_R=75\text{V } T_J=150^\circ\text{C}$
Diode Capacitance	C_D	-	-	2.0	pF	$V_R=0, f = 1\text{MHz}$
Reverse Recovery Time	T_{RR}	-	-	4.0	nS	$I_F=I_R=10\text{mA}, I_{RR}=0.1 \times I_R, R_L=100\Omega$

RATINGS AND CHARACTERISTIC CURVES

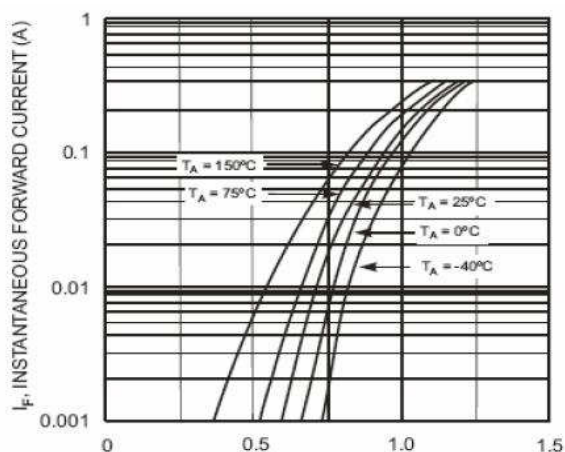


Fig. 1 Forward Characteristics

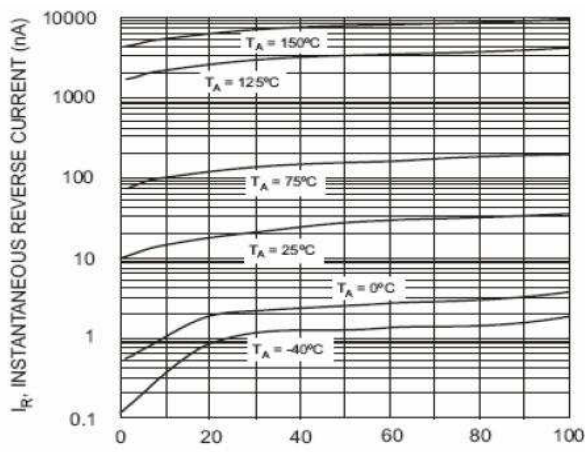


Fig. 2 Typical Reverse Characteristics

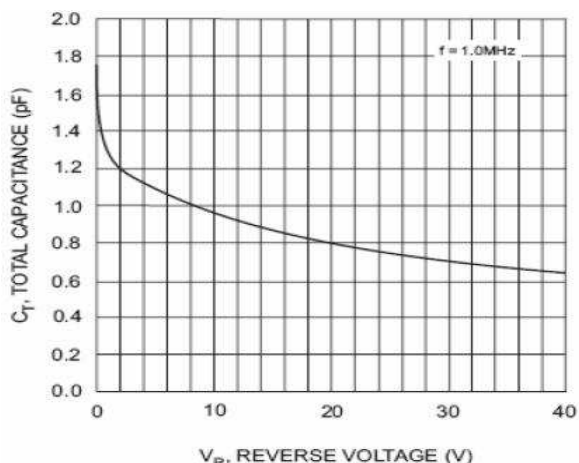


Fig. 3 Typical Capacitance vs. Reverse Voltage

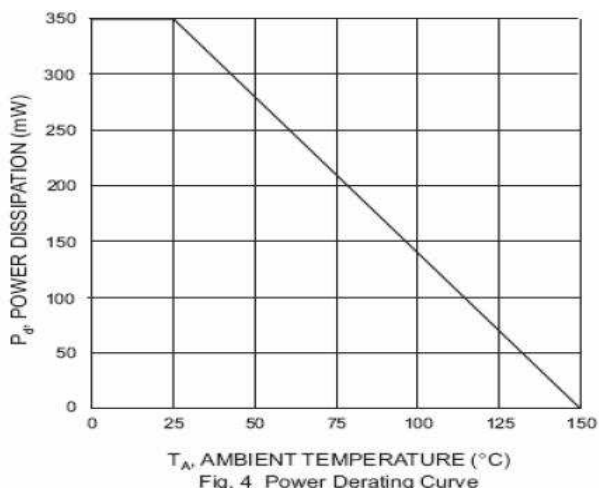


Fig. 4 Power Derating Curve

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