

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

FEATURES

- Fast switching speed
- For General Purpose Switching Applications
- High Conductance

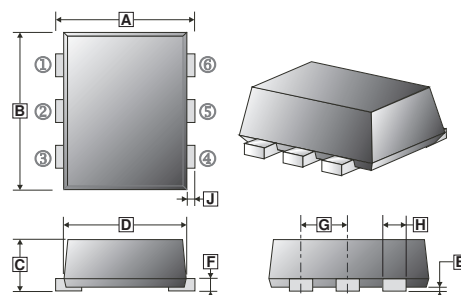
MARKING

KAM

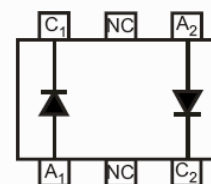
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-563	3K	7 inch

SOT-563



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.50	1.70	F	0.09	0.16
B	1.50	1.70	G	0.45	0.55
C	0.525	0.60	H	0.17	0.27
D	1.10	1.30	J	0.10	0.30
E	-	0.05			



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

Parameter	Symbol	Value	Unit
Non-Repetitive Peak reverse voltage	V _{RM}	100	V
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	75	V
Working Peak Reverse Voltage	V _{RWM}	75	V
Maximum DC Blocking Voltage	V _R	75	V
RMS Reverse Voltage	V _{R(RMS)}	53	V
Peak forward Continuous current	I _{FM}	300	mA
Maximum Average Forward Rectified Current	I _{F(AV)}	200	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=1.0s	1.0
Power dissipation	P _D	150	mW
Thermal Resistance Junction to Ambient	R _{θJA}	833	K / W
Operating Junction and storage temperature range	T _J , T _{STG}	150,-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	$I_R = 100\mu\text{A}$
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}	-	-	1	μA	$V_R = 75\text{V}$
	I_{R2}	-	-	0.025		$V_R = 20\text{V}$
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

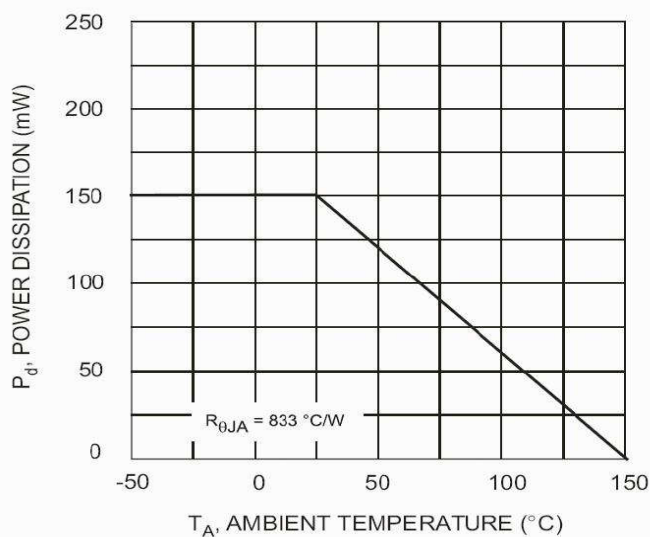


Fig. 1, Derating Curve - Total

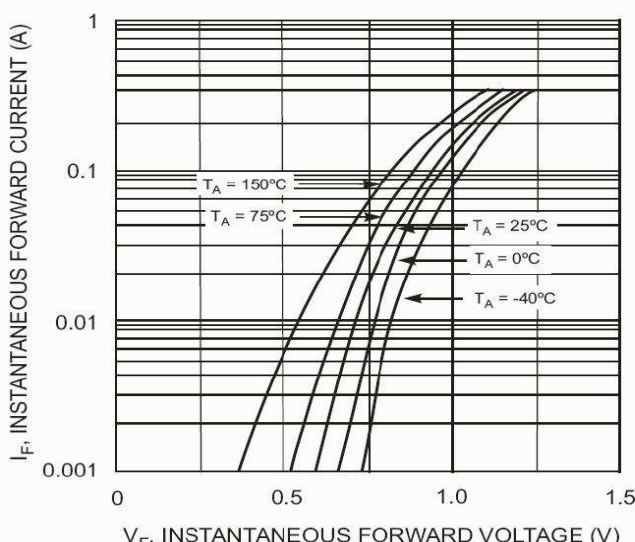


Fig. 2 Forward Characteristics

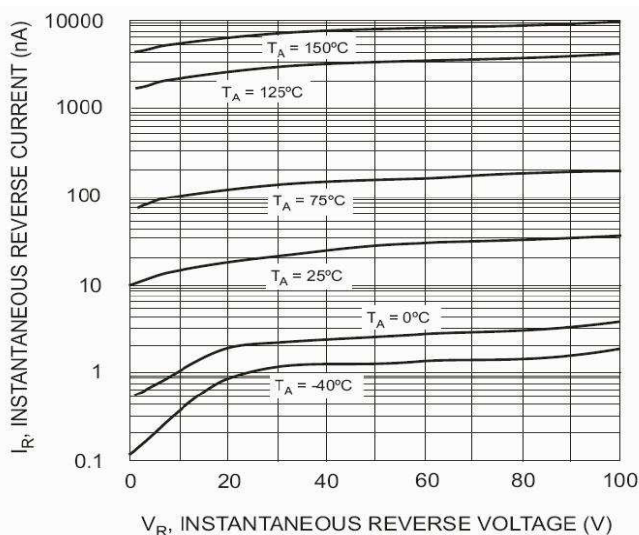


Fig. 3 Typical Reverse Characteristics

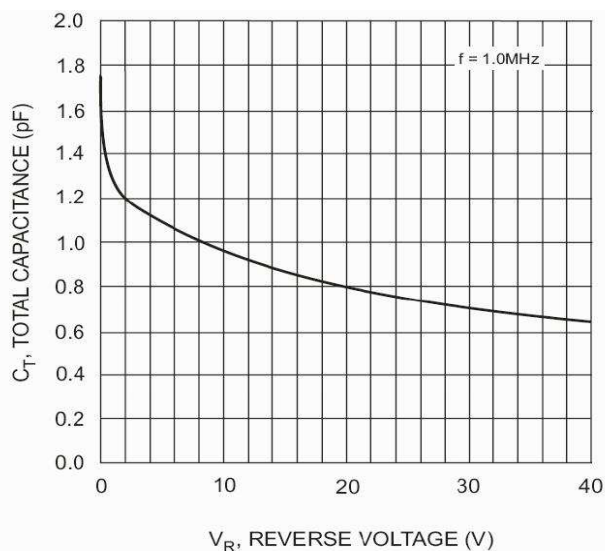


Fig. 4 Typical Capacitance vs. Reverse Voltage