

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

## FEATURES

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

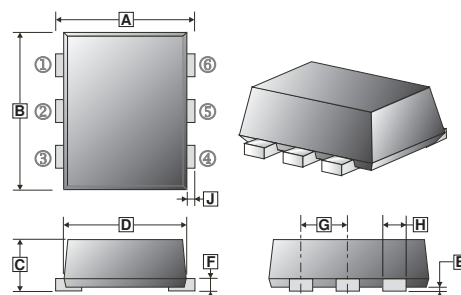
## MARKING

KAM

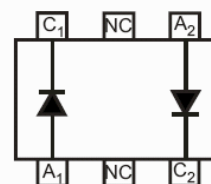
## PACKAGE INFORMATION

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<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak reverse voltage	V <sub>RM</sub>	100	V
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	75	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	75	V
Maximum DC Blocking Voltage	V <sub>R</sub>	75	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	53	V
Peak forward Continuous current	I <sub>FM</sub>	300	mA
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	200	mA
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	t=1.0μs	2.0
		t=1.0s	1.0
Power dissipation	P <sub>D</sub>	150	mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	833	K / W
Operating Junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	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	$\mu\text{A}$	$V_R=75\text{V}$
	$I_{R2}$	-	-	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**

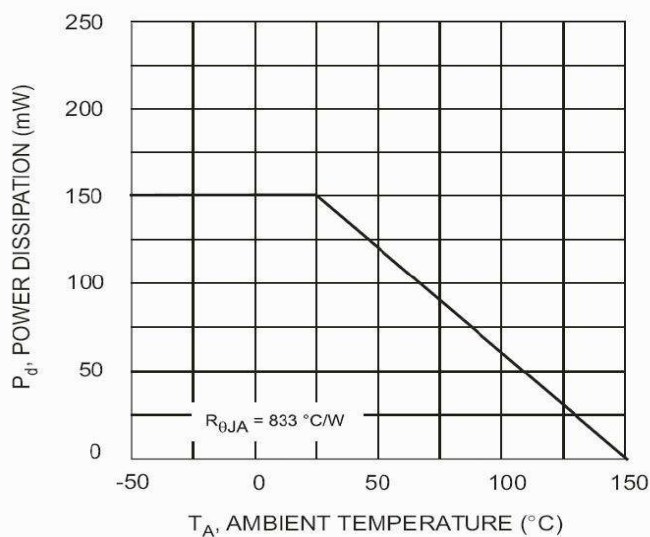


Fig. 1, Derating Curve - Total

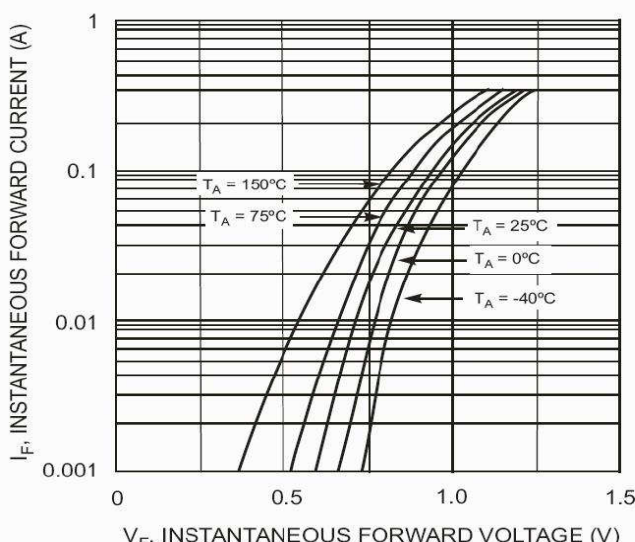


Fig. 2 Forward Characteristics

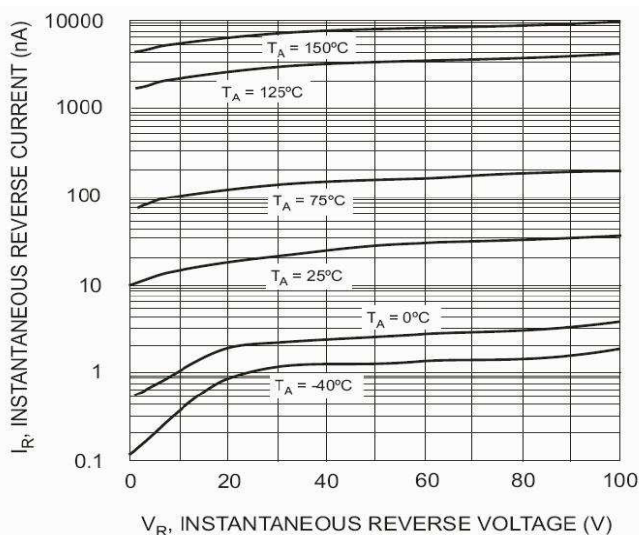


Fig. 3 Typical Reverse Characteristics

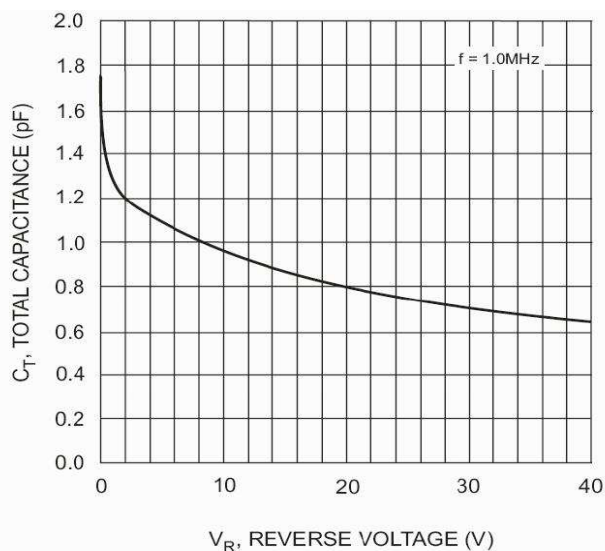


Fig. 4 Typical Capacitance vs. Reverse Voltage