

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

### FEATURES

- Fast switching speed
- High Conductance

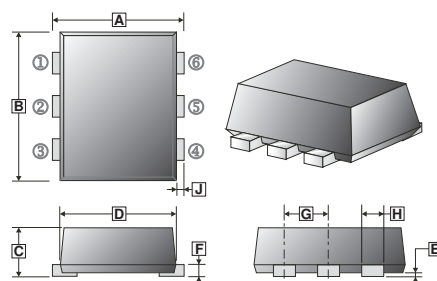
### MARKING

KAL

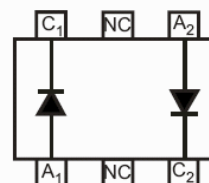
### PACKAGE INFORMATION

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

Parameters	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	80	V
Working Peak Reverse Voltage	$V_{RWM}$	80	V
DC Blocking Voltage	$V_R$	80	V
RMS Reverse Voltage	$V_{R(RMS)}$	57	V
Forward Continuous Current	$I_{FM}$	500	mA
Average Rectified Output Current	$I_o$	250	mA
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	$t=1.0\mu\text{s}$	4.0
		$t=1.0\text{s}$	1.5
Power Dissipation	$P_D$	150	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	833	K / W
Storage Temperature	$T_{STG}$	-65~150	$^\circ\text{C}$

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

Parameters	Symbol	Min.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_R$	80	-	V	$I_R=2.5\mu\text{A}$
Forward Voltage	$V_{F1}$	0.62	0.72	V	$I_F=5\text{mA}$
	$V_{F2}$	-	0.855	V	$I_F=10\text{mA}$
	$V_{F3}$	-	1.0	V	$I_F=100\text{mA}$
	$V_{F4}$	-	1.25	V	$I_F=150\text{mA}$
Maximum DC Reverse Current at rated DC blocking voltage	$I_{R1}$	-	0.1	$\mu\text{A}$	$V_R=70\text{V}$
	$I_{R2}$	-	25	nA	$V_R=20\text{V}$
Capacitance between terminals	$C_T$	-	3.5	pF	$V_R=6\text{V}, f=1\text{MHz}$
Maximum Reverse Recovery Time	$T_{RR}$	-	4	nS	$V_R=6\text{V}, I_F=5\text{mA}$

**RATINGS AND CHARACTERISTIC CURVES**

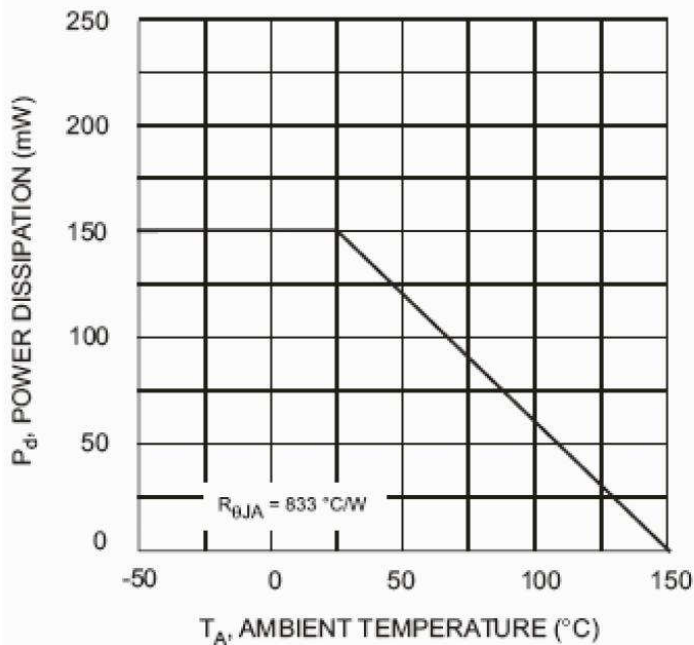


Fig. 1, Derating Curve - Total

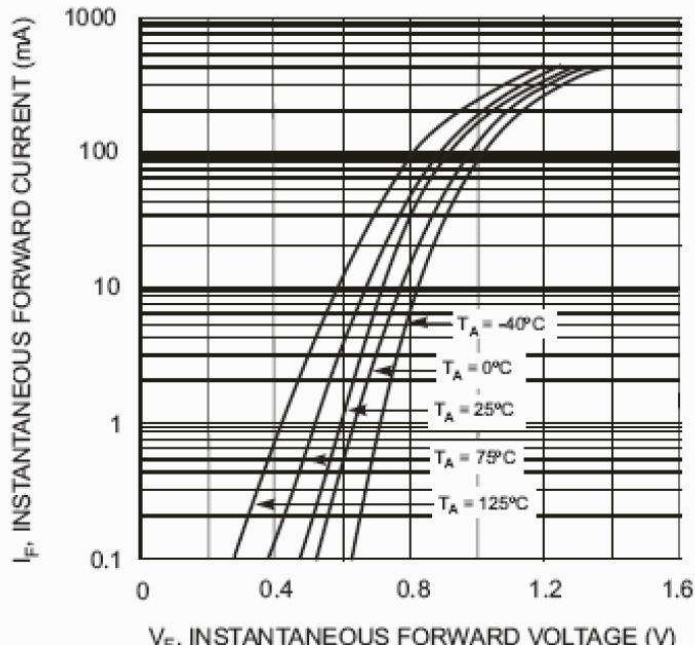


Fig. 2 Typical Forward Characteristics

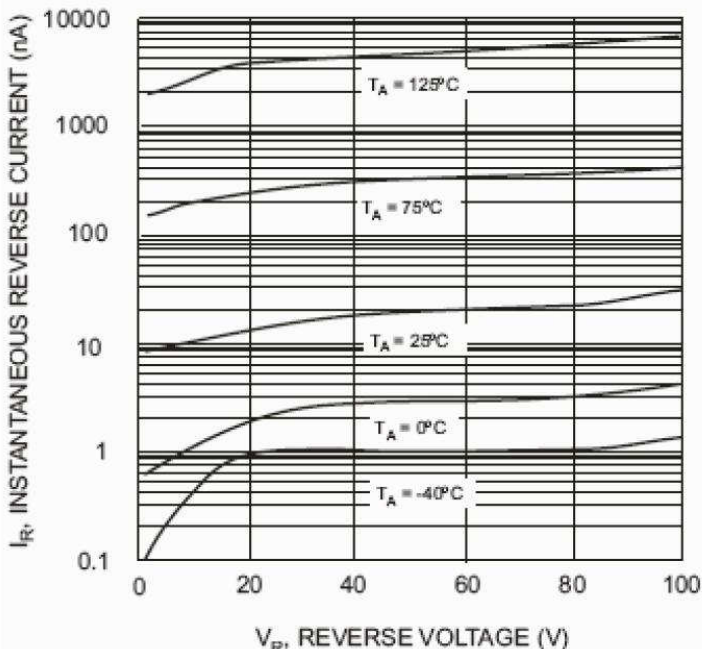


Fig. 3 Typical Reverse Characteristics

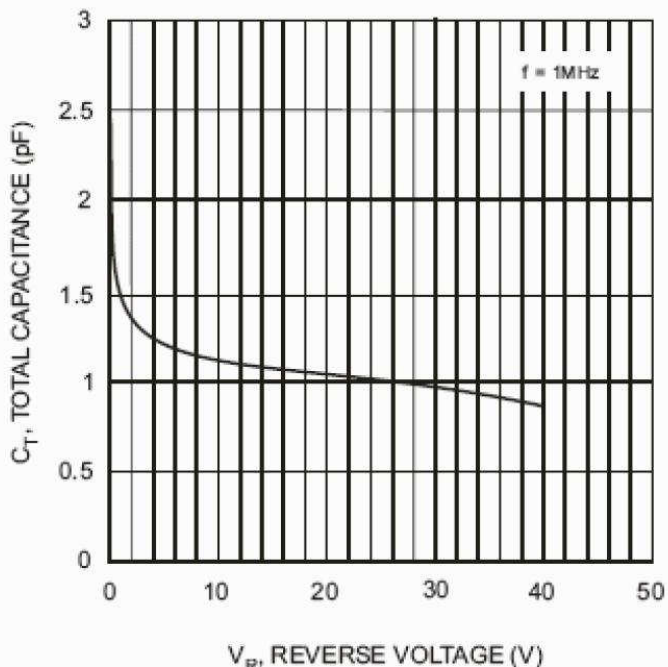


Fig. 4 Typical Capacitance vs. Reverse Voltage