

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

FEATURES

- Fast switching speed
- High Conductance

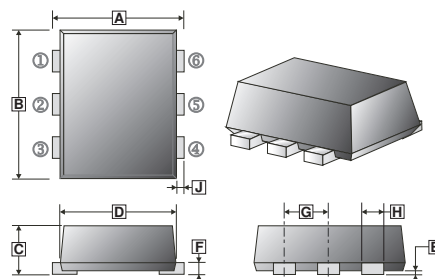
MARKING

KAL

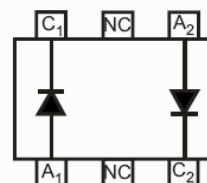
PACKAGE INFORMATION

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	$t=1.0\mu\text{s}$	I_{FSM}	4.0	A
	$t=1.0\text{s}$		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	μA	$V_R=70\text{V}$
	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

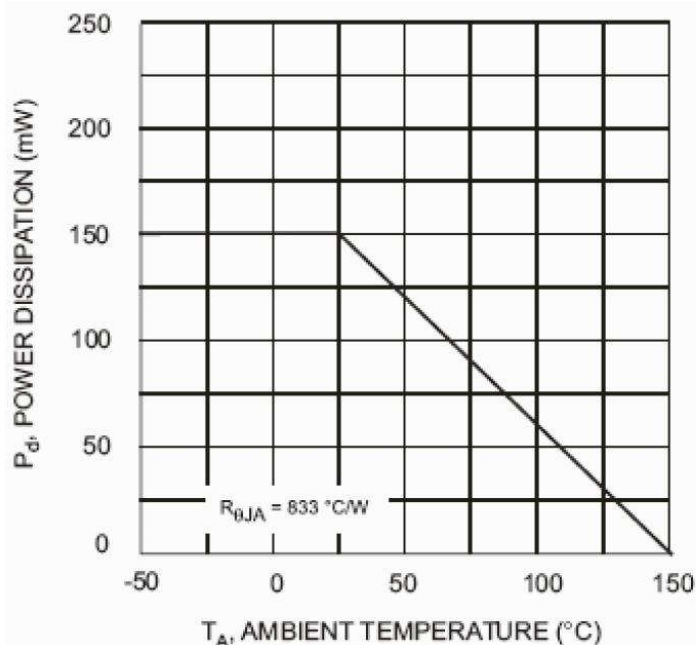


Fig. 1, Derating Curve - Total

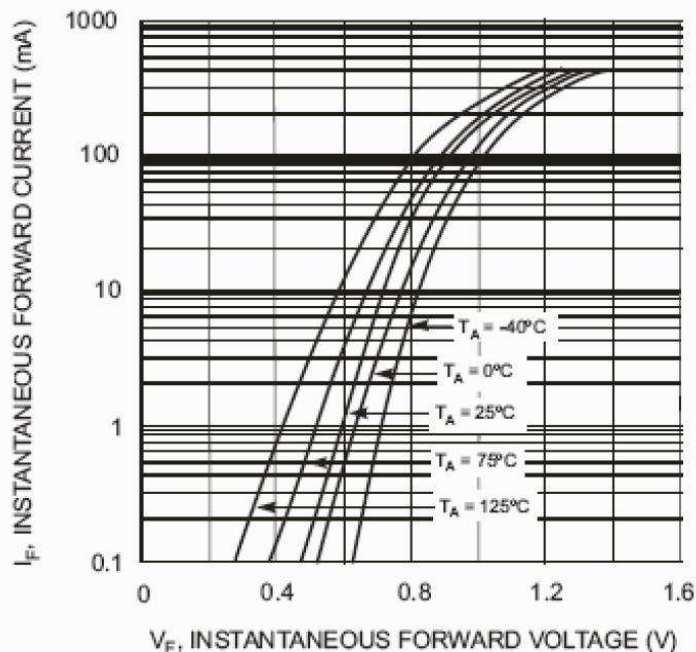


Fig. 2 Typical Forward Characteristics

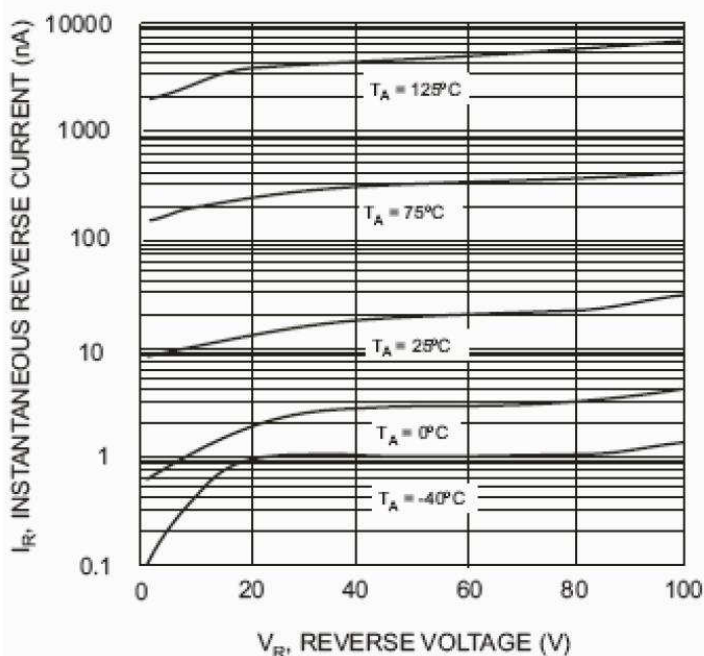


Fig. 3 Typical Reverse Characteristics

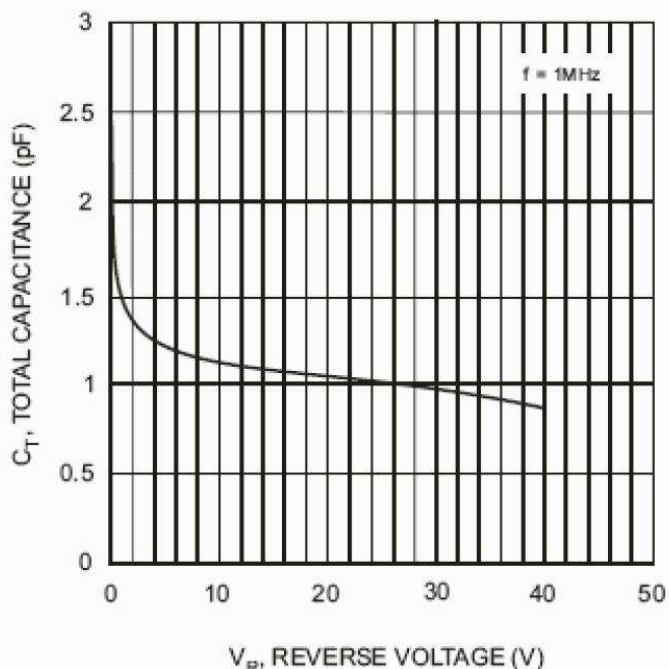


Fig. 4 Typical Capacitance vs. Reverse Voltage