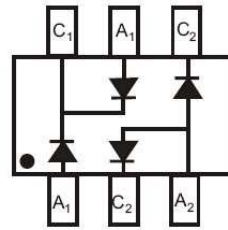


**Features**

- Fast switching
- For general purpose switching applications.
- High conductance.
- Easily connected as full wave bridge.



Schematic Diagram



SOT-363

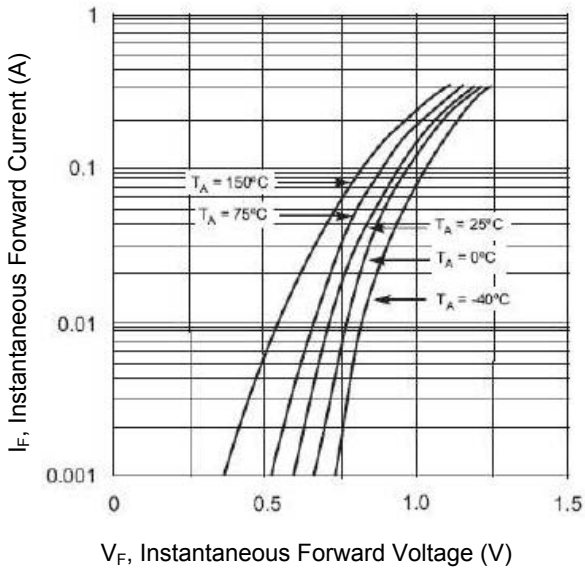
**Maximum Ratings** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbol	Value	Unit	
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V	
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	V	
Working Peak Reverse Voltage	$V_{RWM}$	75	V	
DC Reverse Voltage	$V_R$	75	V	
RMS Reverse Voltage	$V_{R(RMS)}$	53	V	
Average Rectified Output Current	$I_o$	150	mA	
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	@t=1.0 $\mu\text{S}$	2.0	A
		@t=1.0 S	1.0	
Power Dissipation	$P_d$	200	mW	
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	$^\circ\text{C/W}$	
Operating Junction Temperature Range	$T_J$	-65 to +150	$^\circ\text{C}$	
Storage Temperature Range	$T_{STG}$	-65 to +150	$^\circ\text{C}$	

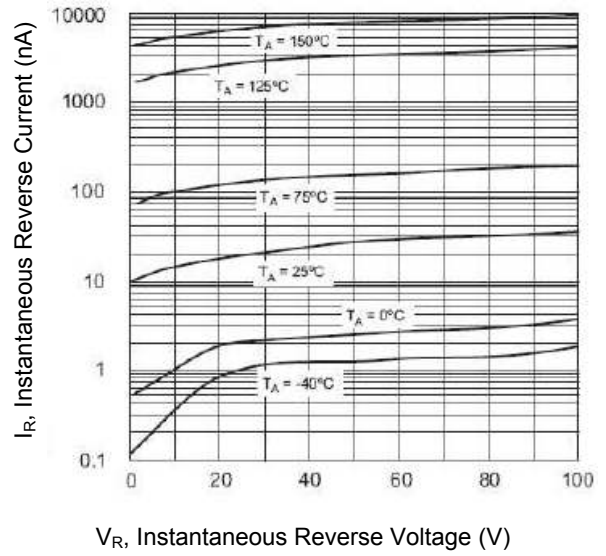
**Electrical Characteristics** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbol	Test Condition	Min	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=2.5\mu\text{A}$	75	-	V
Reverse Voltage Leakage Current	$I_R$	$V_R=75\text{V}, T_J=25^\circ\text{C}$	-	2.5	$\mu\text{A}$
		$V_R=75\text{V}, T_J=150^\circ\text{C}$	-	50	
		$V_R=25\text{V}, T_J=150^\circ\text{C}$	-	30	
		$V_R=20\text{V}, T_J=25^\circ\text{C}$	-	25	
Forward voltage	$V_F$	$I_F=1\text{mA}$	-	0.715	V
		$I_F=10\text{mA}$		0.855	
		$I_F=50\text{mA}$		1.0	
		$I_F=150\text{mA}$		1.25	
Total Capacitance	$C_T$	$V_R=0\text{V}, f=1.0\text{MHz}$	-	2.0	pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=10\text{mA}, I_r=0.1 \cdot I_R, R_L=100\Omega$	-	4.0	ns

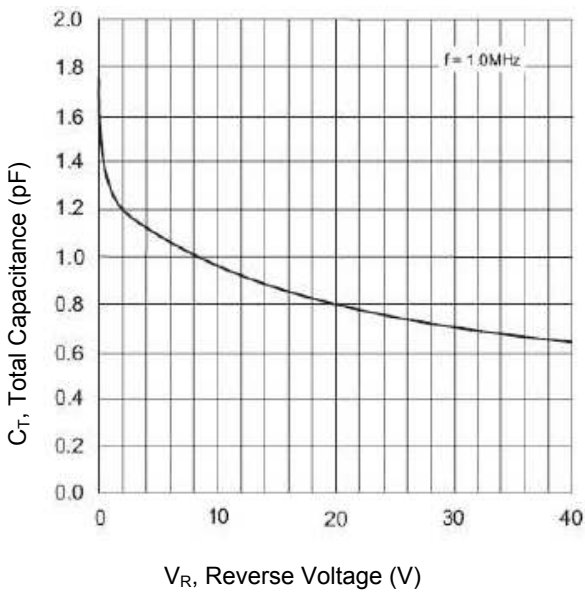
**Typical Characteristic Curves** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)



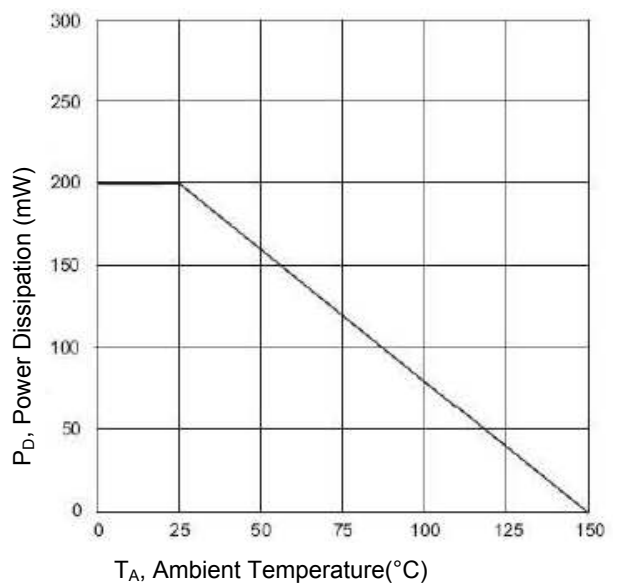
**Figure 1. Typical Forward Characteristic**



**Figure 2. Typical Reverse Characteristic**

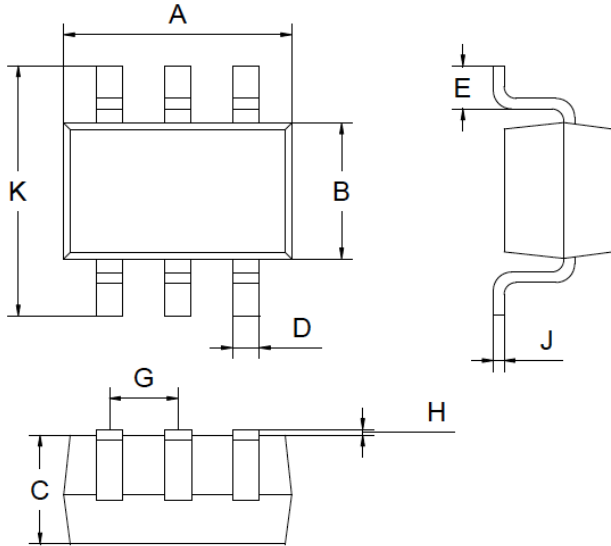


**Figure 3. Total Capacitance VS Reverse Voltage**



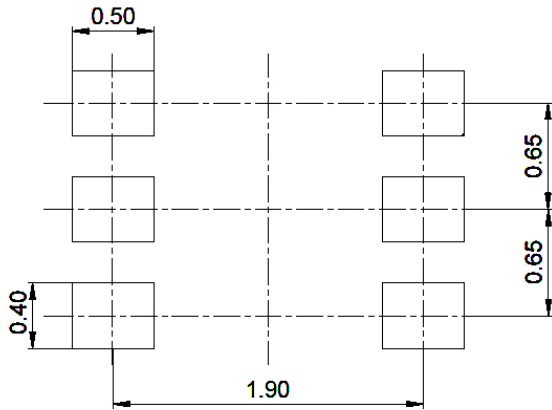
**Figure 4. Power Derating Curve**

**Package Outline Dimensions (SOT-363)**



SOT-363		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.85	1.05
D	0.15	0.35
E	0.25	0.40
G	0.60	0.70
H	0.02	0.10
J	0.05	0.15
K	2.20	2.40
All Dimensions in mm		

**Recommended Pad Layout**



Unit : mm

**Order Information**

Device	Package	Marking	Carrier	Quantity
GSBAV756	SOT-363	KCA	Tape & Reel	3,000pcs