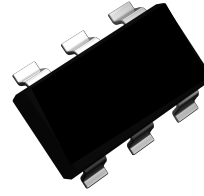
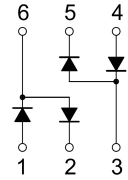


## Features

- Fast Switching Speed
- For General Purpose Switching
- Applications High Conductance



GCH! 6'



Schematic Diagram

## Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise specified)

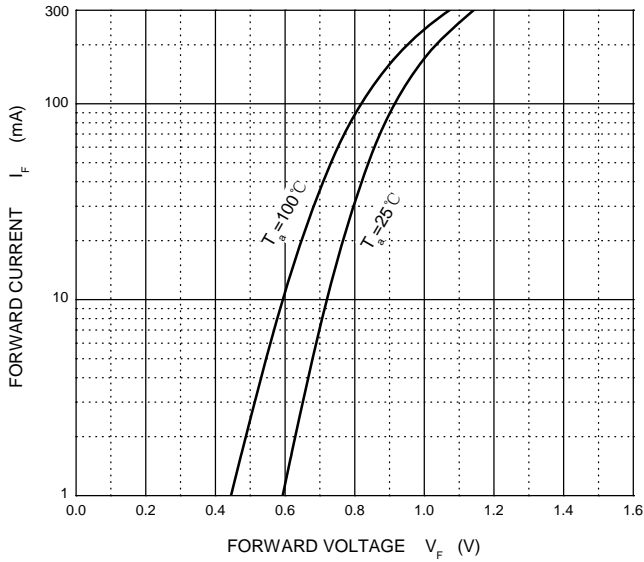
Parameter	Symbol	Value	Unit
Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	75	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>R</sub>		
Forward Continuous Current	I <sub>FM</sub>	300	mA
Average Rectified Output Current	I <sub>O</sub>	150	mA
Non-Repetitive Peak Forward Surge Current @ t=8.3ms	I <sub>FSM</sub>	2.0	A
Power Dissipation	P <sub>D</sub>	200	mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	625	°C/W
Operating Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>STG</sub>	-55 to +150	°C

## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise specified)

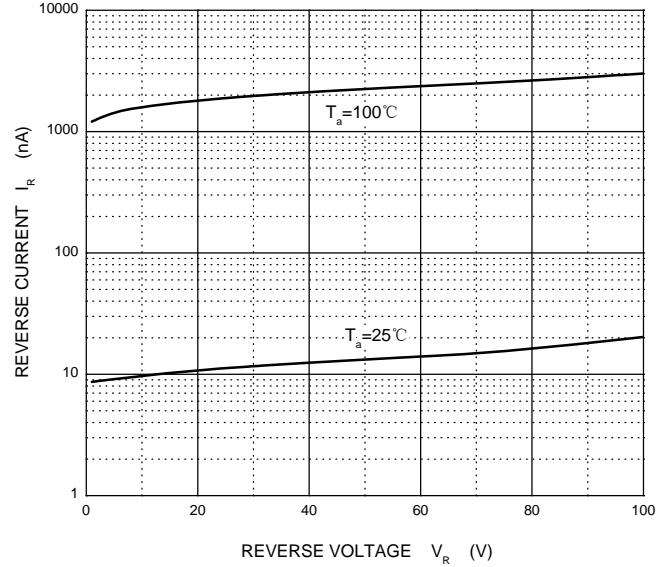
Parameter	Symbol	Test Conditions	Min	Max	Unit
Reverse Voltage	V <sub>(BR)</sub>	I <sub>R</sub> =2.5μA	75	—	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =75V	—	2.5	μA
		V <sub>R</sub> =20V	—	25	nA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1mA	—	0.715	V
		I <sub>F</sub> =10mA	—	0.855	
		I <sub>F</sub> =50mA	—	1	
		I <sub>F</sub> =150mA	—	1.25	
Total Capacitance	C <sub>tot</sub>	V <sub>R</sub> =0, f=1MHz	—	2	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> = I <sub>R</sub> =10mA, I <sub>tr</sub> =0.1×I <sub>R</sub> , R <sub>L</sub> =100Ω	—	4	ns

### Typical Characteristics Curves

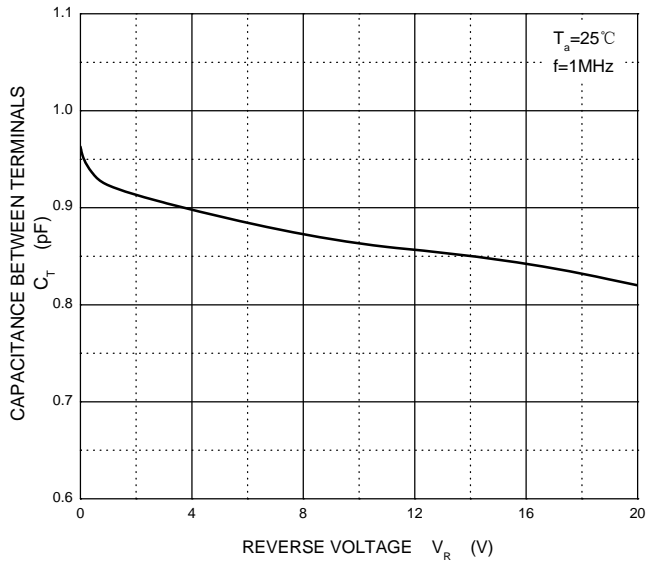
**Forward Characteristics**



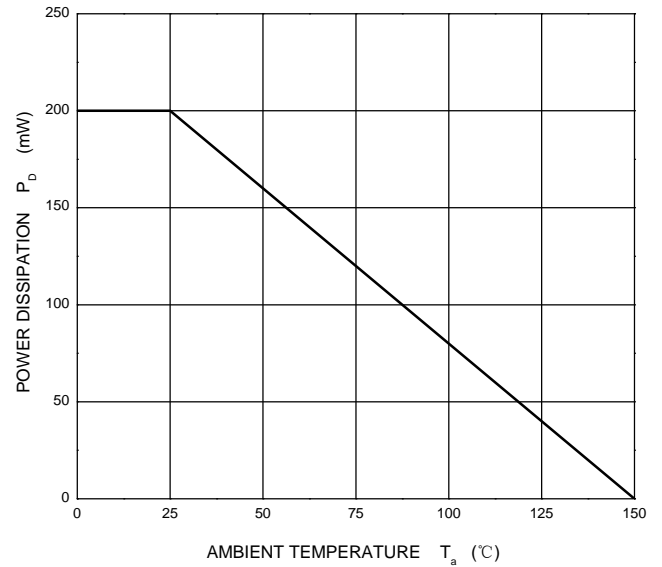
**Reverse Characteristics**



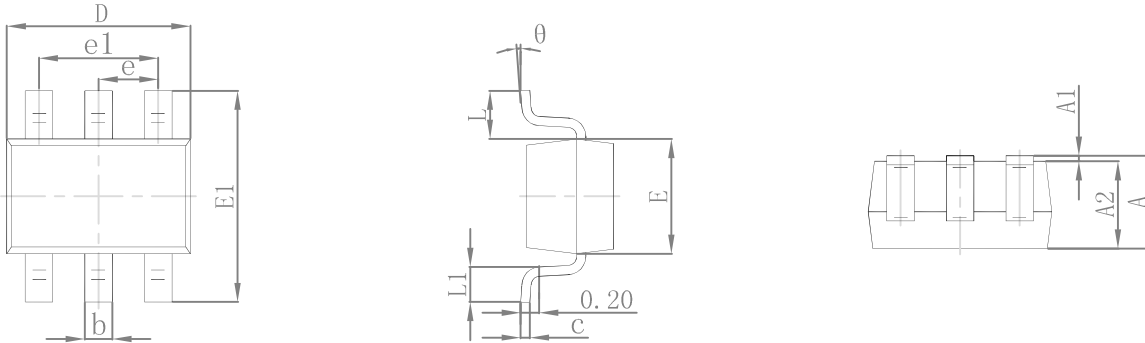
**Capacitance Characteristics**



**Power Derating Curve**

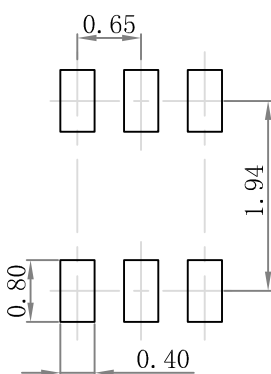


**Package Outline Dimensions SOT-363**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

**Suggested Pad Layout**



- Note:
1. Controlling dimension: in millimeters.
  2. General tolerance:  $\pm 0.05\text{mm}$ .
  3. The pad layout is for reference purposes only.

**Order Information**

Device	Package	Marking	Carrier	Quantity	HSF Status
BAV99DW	SOT-363	KJG	Tape & Reel	3000pcs / Reel	RoHS Compliant