

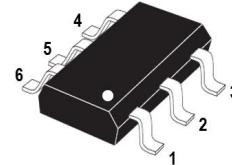
## SSCSBAV99SG

### Fast Switching Diode

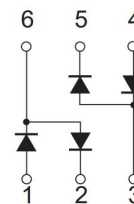
#### ● Features

- ✧ Fast Switching Speed
- ✧ Ultra-Small Surface Mount Package
- ✧ Low Reverse Leakage Current
- ✧ Ideal for Battery Powered Portable Applications
- ✧ RoHS Compliant/Green EMC
- ✧ Moisture Sensitivity: Level 3 per J-STD-020

#### ● PIN configuration



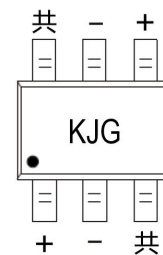
**SOT-363**



**Circuit Diagram**

#### ● Applications

- ✧ High-speed switching for detection
- ✧ Battery Powered Portable
- ✧ Mobile phones, laptops and other electronic devices



**Marking**

#### ● Absolute maximum rating ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

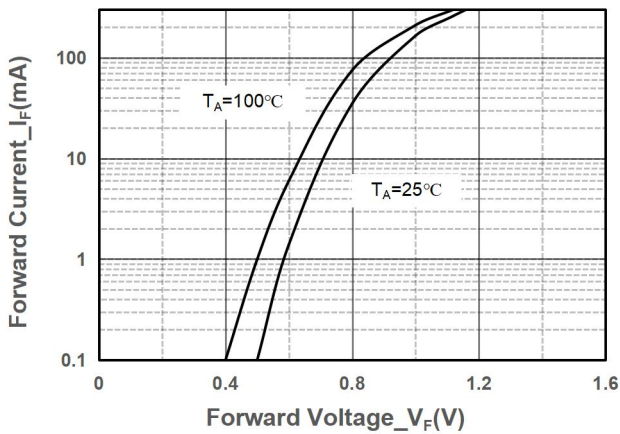
Parameter	Symbol	Value	Unit
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$		
Working Peak Reverse Voltage	$V_{RWM}$	75	V
DC Blocking Voltage	$V_R$		
Average Rectified Output Current	$I_O$	150	mA
Forward Continuous Current	$I_{FM}$	300	mA
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	$I_{FSM}$	2.0	A
Power Dissipation	$P_D$	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	$^{\circ}\text{C}/\text{W}$
Junction Temperature	$T_J$	125	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 ~ +150	$^{\circ}\text{C}$



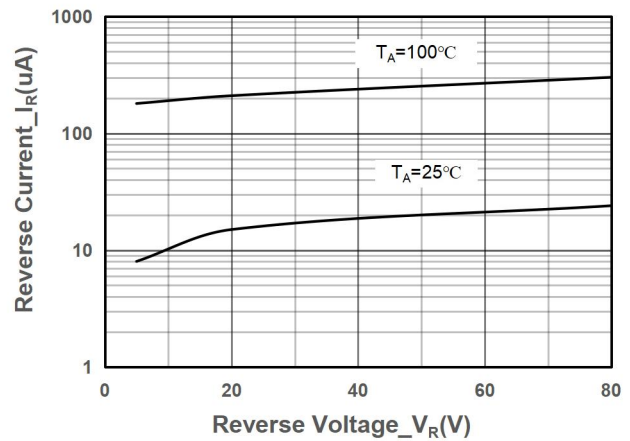
● **Electrical Characteristics ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	$V_R$	$I_R = 2.5\mu\text{A}$	75			V
Forward Voltage	$V_F$	$I_F = 1\text{mA}$			0.715	V
		$I_F = 10\text{mA}$			0.855	V
		$I_F = 50\text{mA}$			1	V
		$I_F = 150\text{mA}$			1.25	V
Reverse Current	$I_R$	$V_R = 25\text{V}$			25	nA
		$V_R = 75\text{V}$			2.5	$\mu\text{A}$
Junction Capacitance	$C_J$	$V_R = 0\text{V}, f = 1\text{MHz}$			2	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}, R_L=100\Omega, I_{rr}=0.1I_R$			4	ns

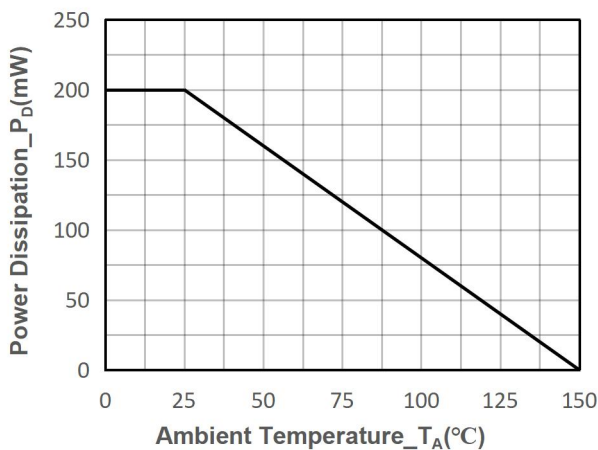
● **Typical Performance Characteristics ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)**



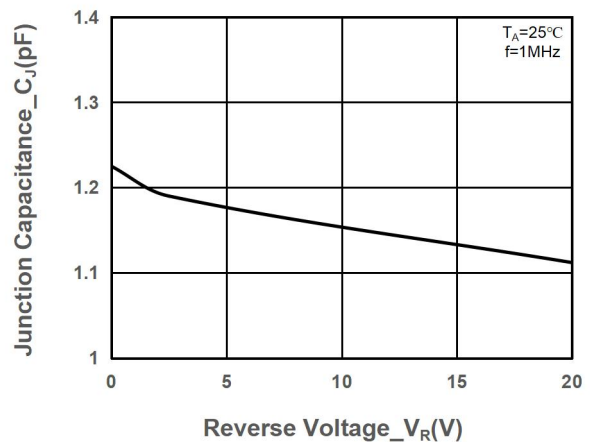
Forward Current vs. Forward Voltage



Reverse Current vs. Reverse Voltage



Power Derating vs. Ambient Temperature



Junction Capacitance vs. Reverse Voltage



## ● Package Information

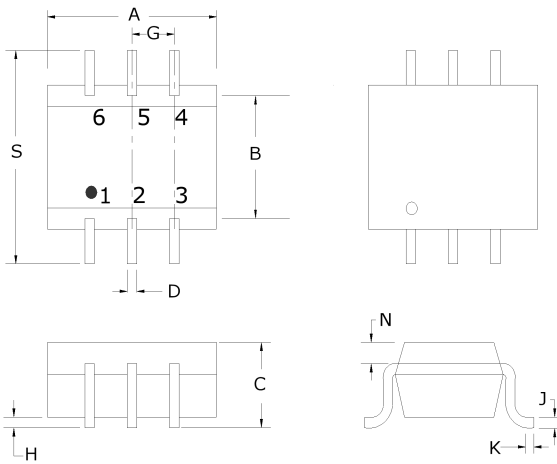
### Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCSBAV99SG	SOT-363	KJG	3000	7 Inch

### Mechanical Data

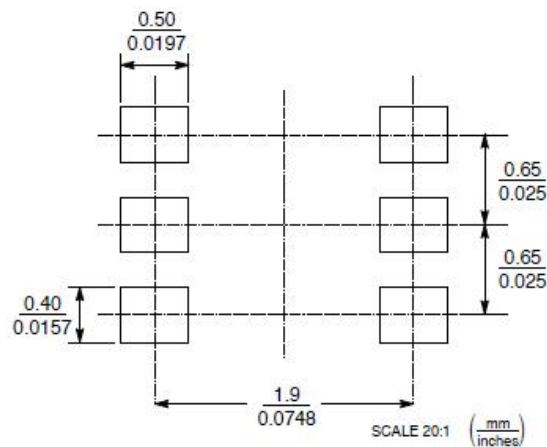
Case: SOT-363

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters		
	Min	Nom	Max
A	1.90	2.00	2.20
B	1.15	-	1.35
C	0.90	-	1.10
D	0.15	-	0.35
G	0.65BSC		
H	-	-	0.10
J	0.08	-	0.15
K	0.15	-	0.35
S	2.10	-	2.45
N	0.20REF		

### Recommended Pad outline





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