

SWITCHING DIODE

Features

- Extremely small surface mounting type.
- High Speed

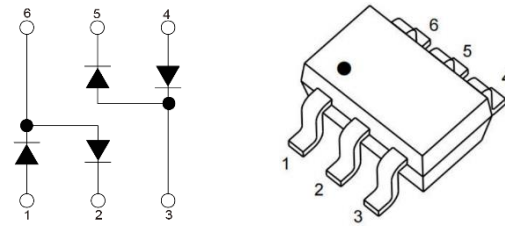
Mechanical Data

- Package: SOT-363
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208

Application information

- High speed switching

Schematic and Pin configuration



KJG= Device Making Code

Ordering Information

Part Number	Shipping	Reel Size
BAV99DW	3000/Tape & Reel	7 inch

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

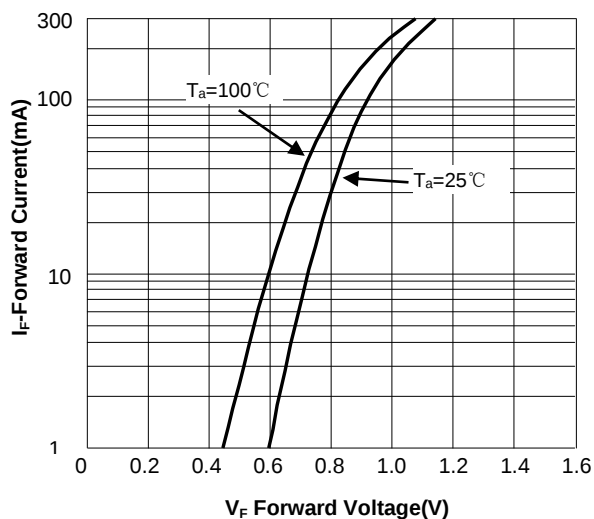
Parameter	Symbol	Value	Unit
Peak Repetitive Peak Reverse Voltage	V _{RRM}	75	V
Working Peak Reverse Voltage	V _{RWM}	75	V
DC Blocking Voltage	V _R	75	V
Peak forward current	I _{FM}	300	mA
Mean rectifying current	I _O	150	mA
Non-repetitive Peak Forward Surge Current@t= 8.3ms	I _{SURGE}	2	A
Power Dissipation	P _D	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	630	°C/W
Junction temperature	T _j	125	°C
Storage temperature	T _{STG}	-40~125	°C

Electrical Characteristics (T_A=25°C unless otherwise specified)

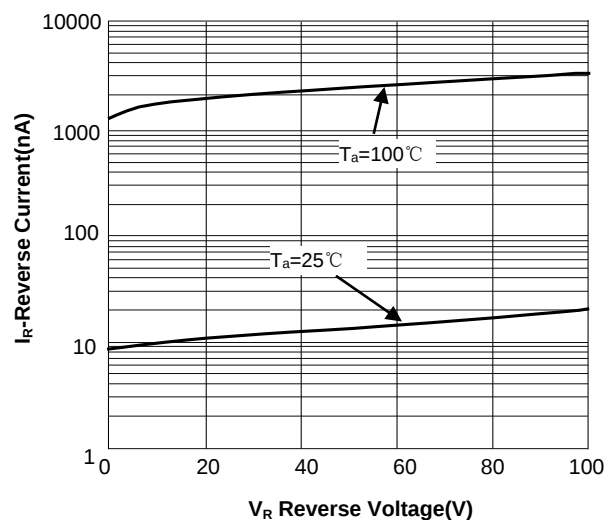
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Voltage	V _{BR}	75	-	-	V	I _R =1uA

Reverse current	I_R	-	-	1.0	uA	$V_R=75V$
Reverse current		-	-	40	nA	$V_R=20V$
Forward voltage	V_F	-	-	0.715	V	$I_F=1mA$
		-	-	0.855	V	$I_F=10mA$
		-	-	1.0	V	$I_F=50mA$
		-	-	1.25	V	$I_F=150mA$
Total capacitance	C_{tot}	-	-	2	pF	$V_R=0V, f=1MHz$
Reverse recovery time	t_{rr}	-	-	4	nS	$I_F=I_R=10mA, I_{rr}=0.1 \cdot I_R, R_L=100\Omega$

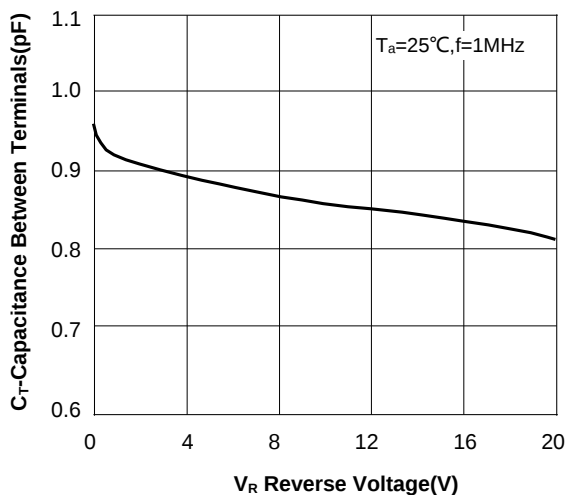
Typical Characteristics ($T_A=25^\circ C$ unless otherwise specified)



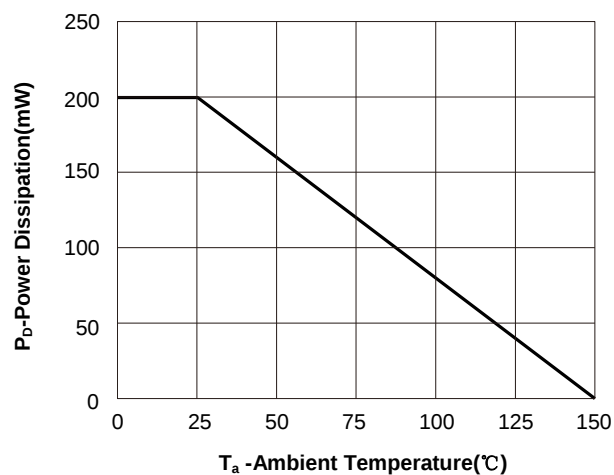
Forward Current vs. Forward Voltage



Forward Current vs. Reverse Voltage

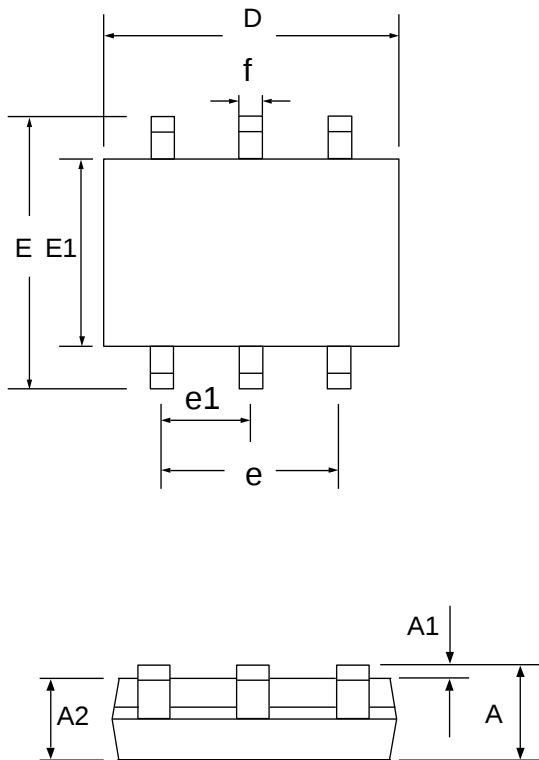


Forward Current vs. Reverse Voltage



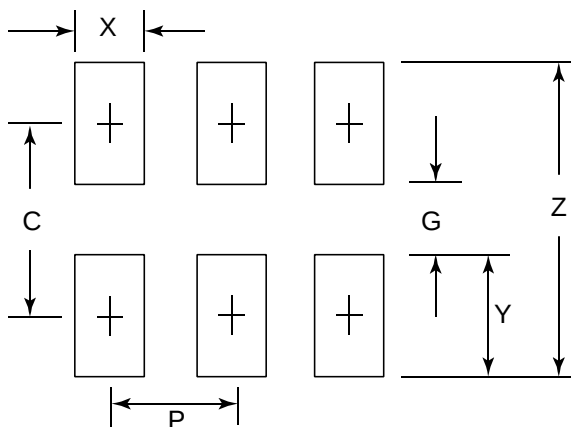
Forward Current vs. Ambient Temperature

SOT-363 Package Outline Drawing



SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A			1.10			0.043
A1			0.10			0.004
A2	0.70	0.90	1.00	0.028	0.035	0.039
D	1.80	2.00	2.20	0.071	0.079	0.087
E	2.10 BSC			0.083 BSC		
E1	1.15	1.25	1.35	0.045	0.049	0.053
e	1.30 BSC			0.051 BSC		
e1	0.65 BSC			0.026 BSC		
f			1.10	0.012		0.020

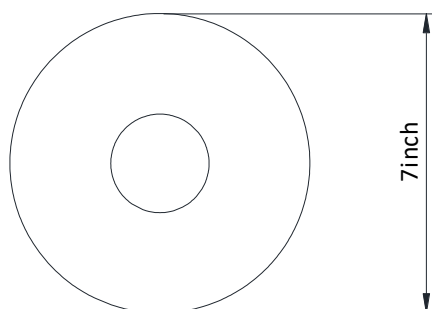
Suggested Land Pattern



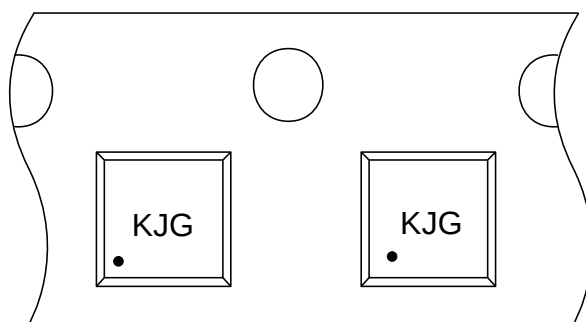
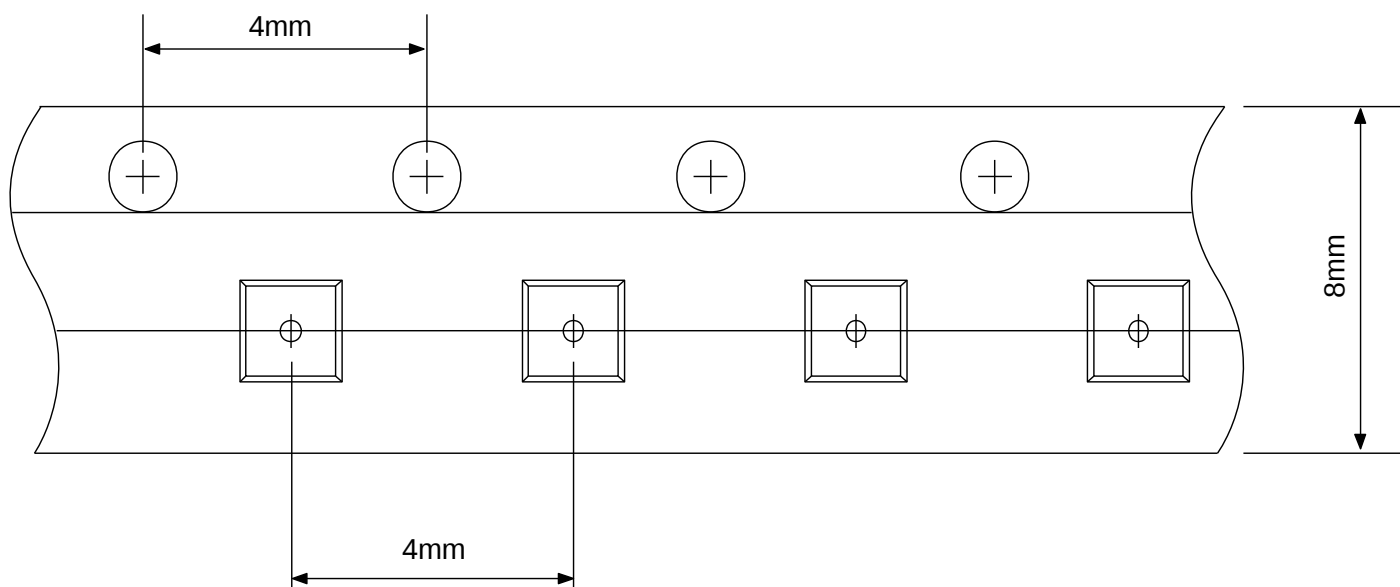
SYM	DIMENSIONS	
	MILLIMETERS	INCHES
C	1.85	0.073
G	1.00	0.039
P	0.65	0.026
X	0.40	0.016
Y	0.85	0.033
Z	2.70	0.106

TAPE AND REEL INFORMATION

Reel Dimensions



Tape Dimensions



User Direction of Feed

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