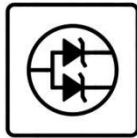


# MSKSEMI

SEMICONDUCTOR



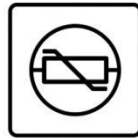
ESD



TVS



TSS



MOV

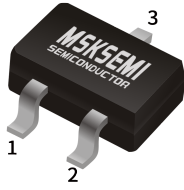


GDT

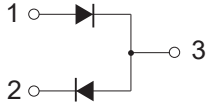


PLED

Product data sheet



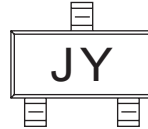
**SOT-23**



**FEATURES**

- This Switching Diode has The Following Features:
- Low Leakage Current Applications

**Marking: JY**



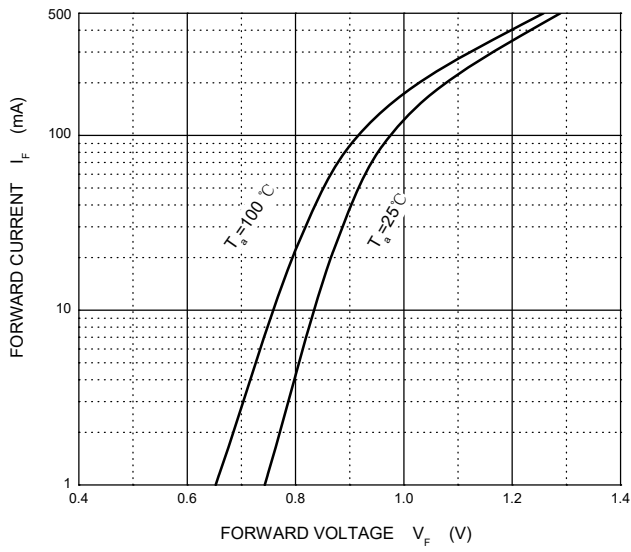
**Maximum Ratings @Ta=25°C**

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	70	V
DC Blocking Voltage	$V_R$	70	V
Forward Continuous Current	$I_{FM}$	500	mA
Average Rectified Output Current	$I_O$	215	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	$I_{FSM}$	1.0	A
Power Dissipation	$P_D$	200	mW
Junction Temperature	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-55~+150	°C

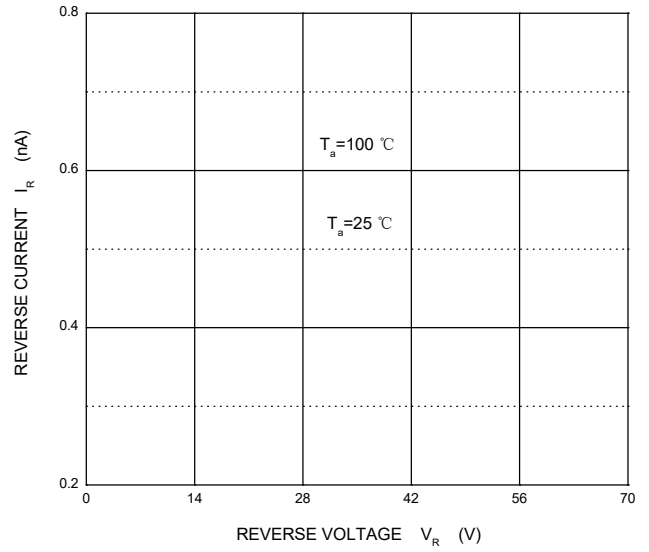
**ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 100\mu A$	70		V
Reverse voltage leakage current	$I_R$	$V_R = 70V$		5	nA
Forward voltage	$V_F$	$I_F = 1mA$ $I_F = 10mA$ $I_F = 50mA$ $I_F = 150mA$		900 1000 1100 1250	mV
Diode capacitance	$C_D$	$V_R = 0, f = 1MHz$		2	pF
Reverse recovery time	$t_{rr}$	$I_F = I_R = 10mA$		3	μs

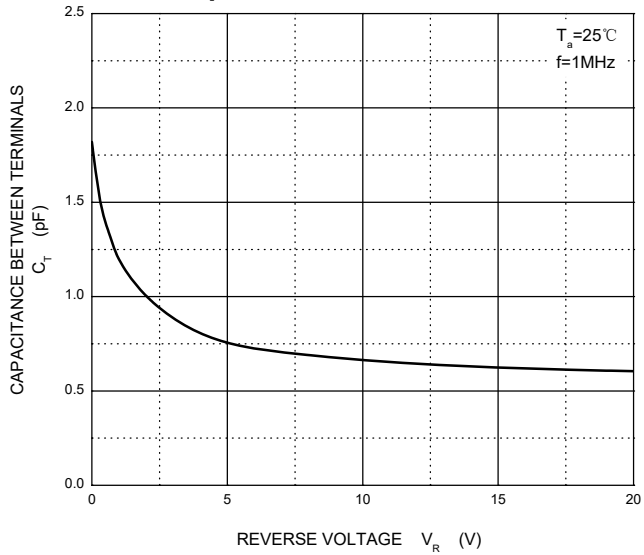
**Forward Characteristics**



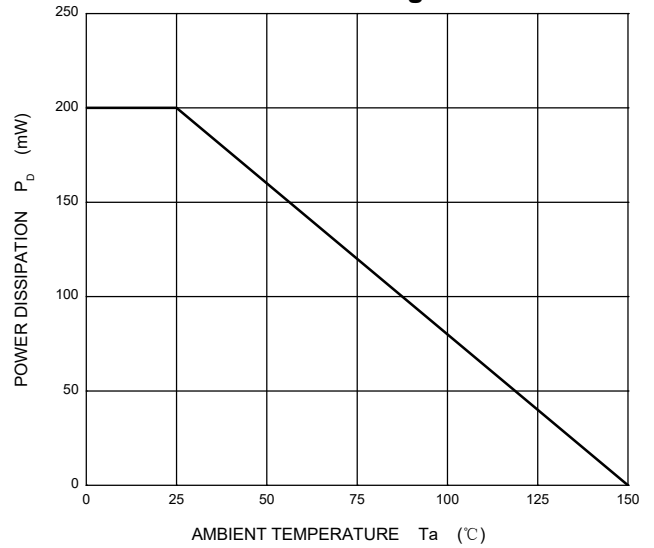
**Reverse Characteristics**



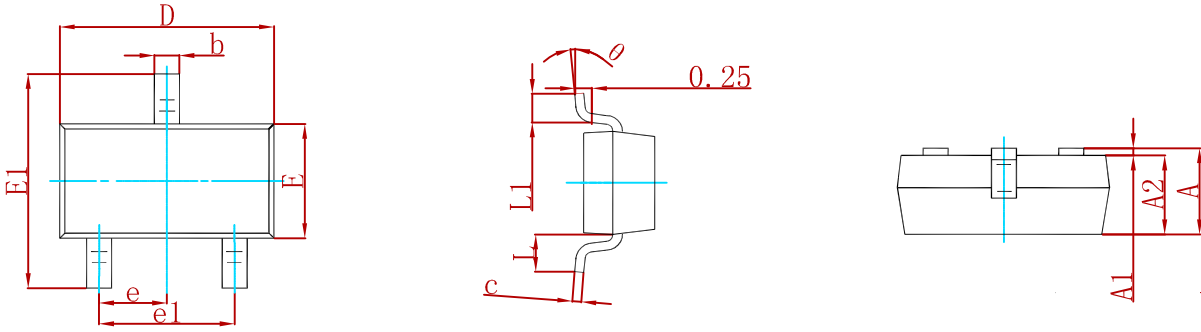
**Capacitance Characteristics**



**Power Derating Curve**

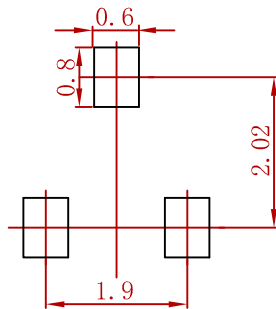


**PACKAGE MECHANICAL DATA**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

**Suggested Pad Layout**



- Note:
1. Controlling dimension: in millimeters.
  2. General tolerance: ± 0.05mm.
  3. The pad layout is for reference purposes only.

**REEL SPECIFICATION**

P/N	PKG	QTY
BAV199	SOT-23	3000

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