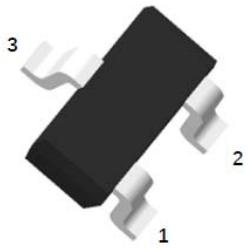
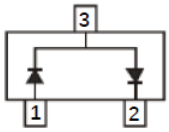
Dual Switching Diode





Features

- Moisture sensitivity level 1
- Reverse voltage: 85V
- Average forward current: 150mA

Application

- High frequency rectifier
- Signal switching

Mechanical data

- **Package**: SOT-523
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ **Maximum Ratings** (T_a=25℃ Unless otherwise specified)

Parameter	Symbol	Unit	Value
Device marking code			JE
Repetitive peak reverse voltage	V_{RRM}	V	85
Forward current, per leg	I_F	mA	150
Non-repetitive surge peak forward current @ t=8.3ms half-sine wave	I_{FSM}	A	1
Non-repetitive surge peak forward current @ t=1ms square wave			1.5
Power dissipation	P_D	mW	150
Junction temperature	T_J	℃	-55 to +150
Storage temperature	T_{STG}	℃	-55 to +150

■ Electrical Characteristics (Ta=25℃ Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Reverse voltage	V_R	V	I_R=1uA	85		
Forward voltage	V_{F1}	V	I_F=1mA			0.715
	V_{F2}	V	I_F=10mA			0.855
	V_{F3}	V	I_F=50mA			1.0
	V_{F4}	V	I_F=150mA			1.25
Reverse leakage current	I_{R1}	uA	V_R=25V			0.03
	I_{R2}	uA	V_R=75V			2
Junction capacitance	Cj	pF	V_R=0V,f=1.0MHz			1.5
Reverse recovery time	Trr	ns	I_F=I_R=10mA, Irr=0.1*I_R, R_L=100Ω			4

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	$R_{\theta J-A}$(1)	℃/W	833
Thermal resistance, junction-to-case	$R_{\theta J-C}$(1)	℃/W	666

Note:

（1）Thermal resistance from junction to ambient and from junction to case mounted on P.C.B. with 25.4mm*25.4mm copper pad areas

■Characteristics

Fig 1：P_D-Ta Curve

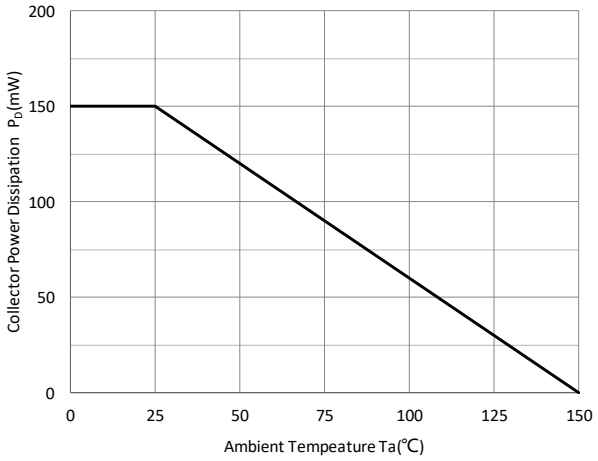


Fig 2：Capacitance Capability

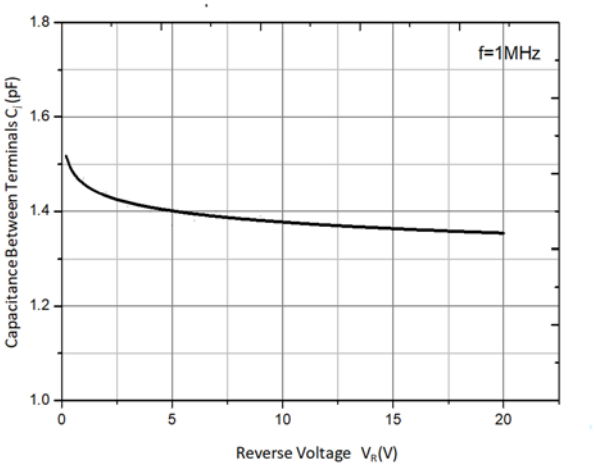


Fig 3：Typical Forward Characteristics

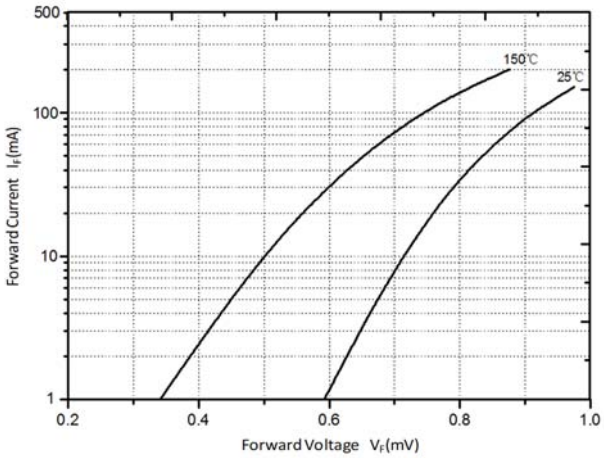
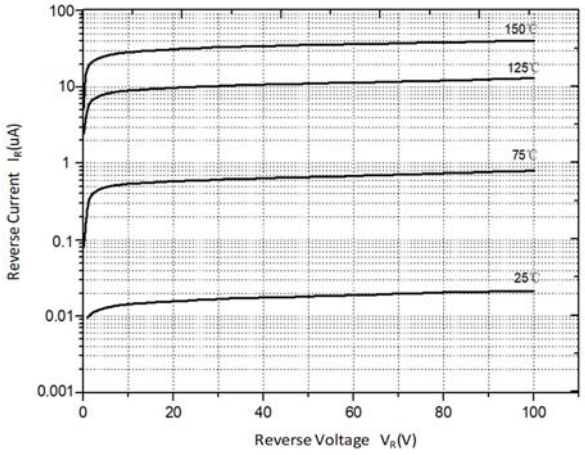


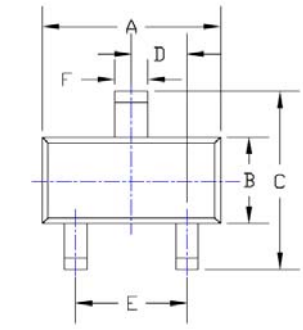
Fig 4：Typical Reverse Characteristics



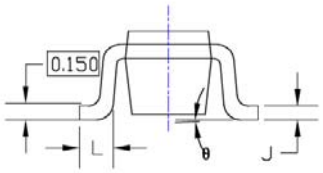
■Ordering Information

Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner Box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
BAV99T	F2	Approximate 0.0027	3000	30000	120000	7” reel

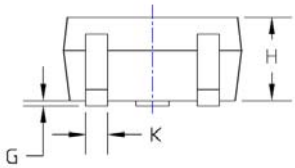
■ Outline Dimensions



TOP VIEW



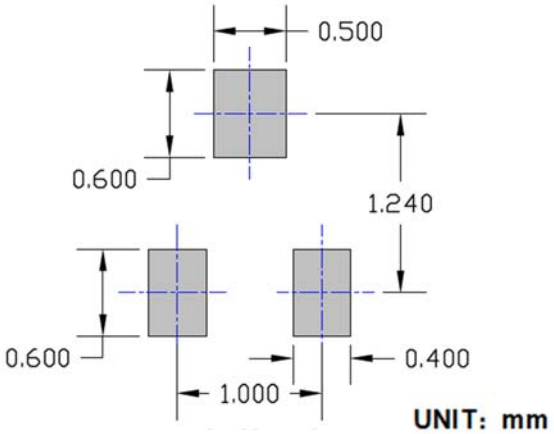
SIDE VIEW



SIDE VIEW

DIMENSIONS				
SYMBOL	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.059	0.067	1.500	1.700
B	0.030	0.033	0.750	0.850
C	0.057	0.069	1.450	1.750
D	0.020TYP		0.500TYP	
E	0.035	0.043	0.900	1.100
F	0.010	0.018	0.250	0.450
G	0.000	0.004	0.000	0.100
H	0.024	0.031	0.600	0.800
J	0.004	0.008	0.100	0.200
K	0.006	0.014	0.150	0.350
L	0.010	0.018	0.260	0.460
θ	0°	8°	0°	8°

■ Suggested Pad Layout



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