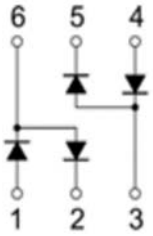
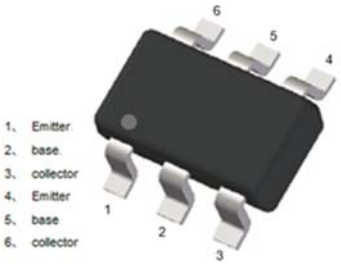
Small-Signal Switching Diodes





Features

- Moisture sensitivity level 1
- Reverse voltage：75V
- Average forward current ：150mA

Application

- High frequency and low voltage rectifier

Mechanical data

- **Package**：SOT-363S
- **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			KJG
Repetitive peak reverse voltage	V_{RRM}	V	75
Forward current	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	200
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=0.1mA	75		
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
	V_{F4}	V	I_F=150mA			1.25
Reverse leakage current	I_{R1}	uA	V_R=20V			0.025
	I_{R2}	uA	V_R=75V			2.5
Junction capacitance	Cj	pF	V_R=0V,f=1MHz		2	
Reverse recovery time	Trr	ns	I_F=10mA,Irr=0.1I_R,R_L=100Ω		4	

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	RθJ-A(1)	℃/W	625
Thermal resistance, junction-to-case	RθJ-C(1)	℃/W	500

Note:

（1）Device mounted on PCB, single-sided copper，with standard footprint

■Characteristics

Fig 1：P_D-Ta Curve

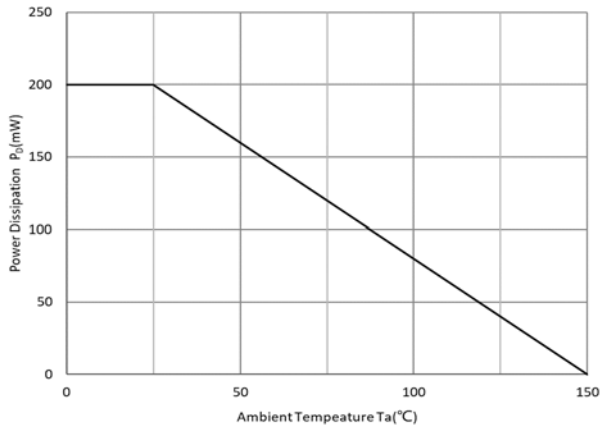


Fig 2：Capacitance Capability

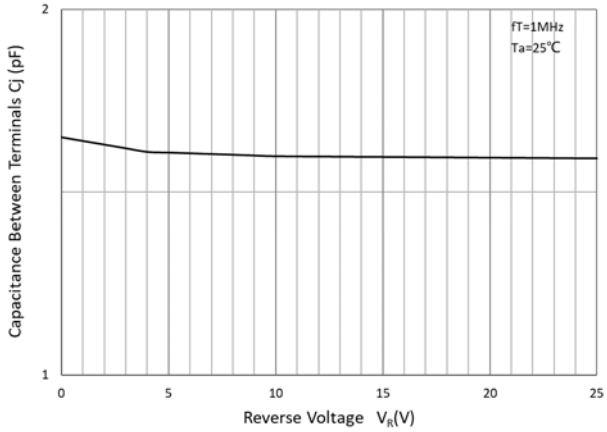


Fig 3：Typical Forward Characteristics

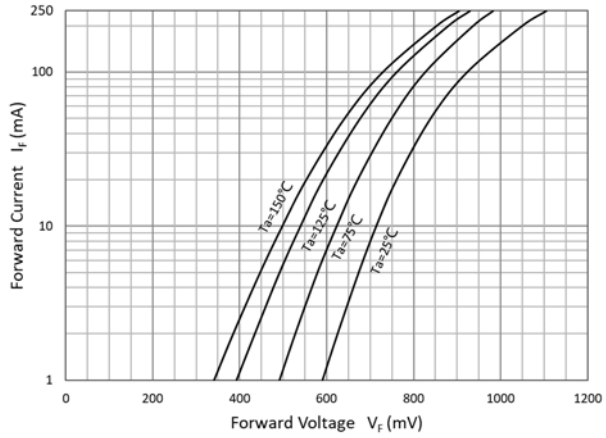
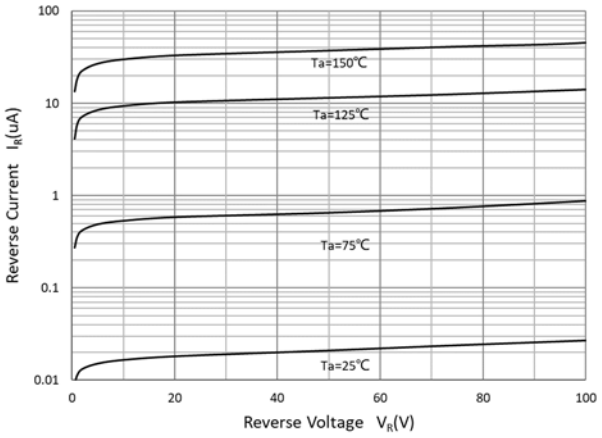


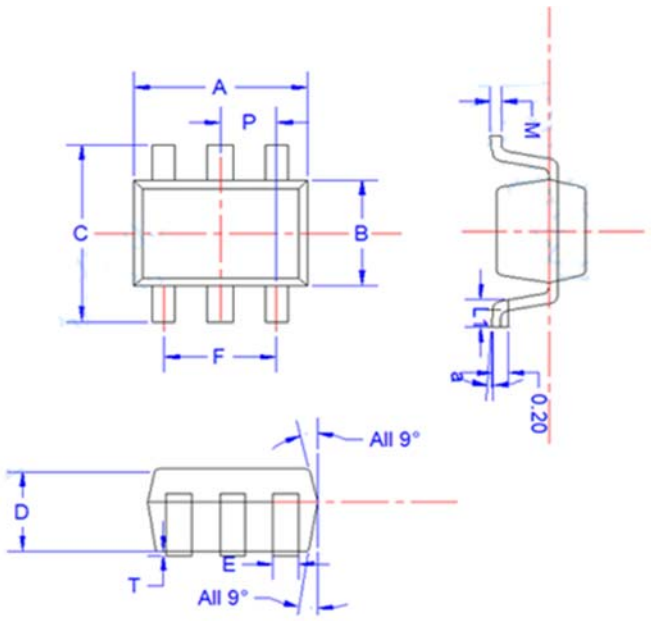
Fig 4：Typical Reverse Characteristics



■Ordering Information

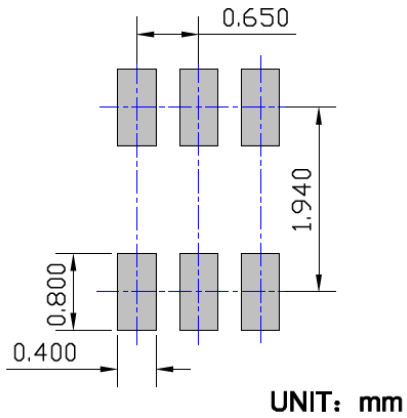
Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity (pcs)	Delivery mode
BAV99DWS	F2	Approximate 0.009	3000	30000	120000	7” reel
BAV99DWS	F3	Approximate 0.009	10000	/	210000	7” reel

■ Outline Dimensions



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
E	0.15	0.25	0.35
B	1.15	1.25	1.35
C	2.00	2.10	2.20
P		0.650BSC	
A	1.80	2.00	2.20
T	0.00	0.05	0.100
D	0.90	0.95	1.00
L1	0.20	0.30	0.40
a		4°±4°	
M	0.10	0.15	0.25

■ Suggested Pad Layout



UNIT：mm

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