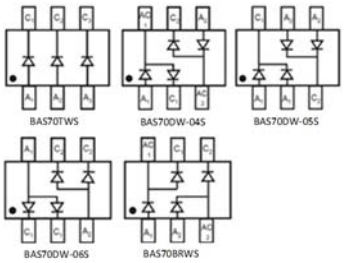
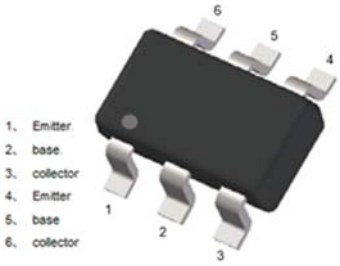
Schottky Barrier Diodes





Features

- Moisture sensitivity level 1
- Reverse voltage：70V
- Average forward current ：70mA

Application

- Signal switching
- High frequency 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			BAS70TWS	K73
			BAS70DW-04S	K74
			BAS70DW-05S	K71
			BAS70DW-06S	K76
			BAS70BRWS	K75
Repetitive peak reverse voltage	V_{RRM}	V	70	
Forward current	I_F	mA	70	
Non-repetitive Surge peak forward current @ t=8.3ms half-sine wave	I_{FSM}	A	0.1	
Non-repetitive Surge peak forward current @ t=1ms square wave			0.1	

Parameter	Symbol	Unit	Value
Power dissipation	P_D	mW	200
Junction temperature	T_J	℃	-55 to +125
Storage temperature	T_{STG}	℃	-55 to +125

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

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Reverse voltage	V_R	V	I_R=10uA	70		
Forward voltage	V_{F1}	V	I_{FM}=1mA			0.41
	V_{F2}	V	I_{FM}=15mA			1
Reverse leakage current	I_R	uA	V_R=50V			0.1
Junction capacitance	Cj	pF	V_R=1.0V,f=1MHz			2
Reverse recovery time	Trr	ns	I_F=I_R=10mA, Irr=0.1*IR,			5

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	$R_{\theta J-A}$(1)	℃/W	500
Thermal resistance, junction-to-case	$R_{\theta J-C}$(1)	℃/W	400

Note:

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

■Characteristics

Fig 1：P_D-Ta Curve

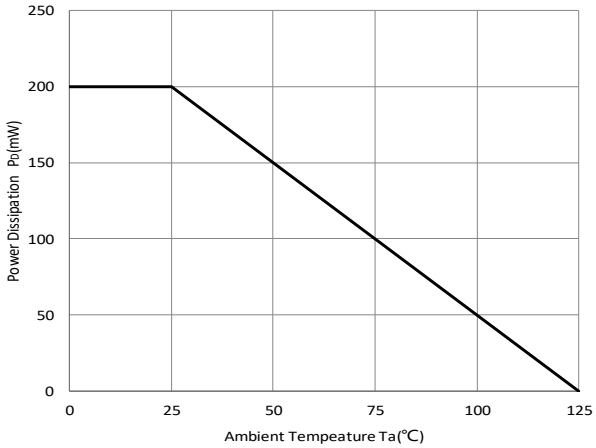


Fig 2：Capacitance Capability

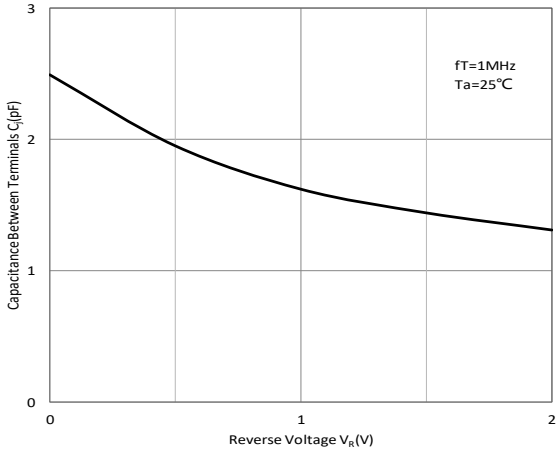


Fig 3：Typical Forward Characteristics

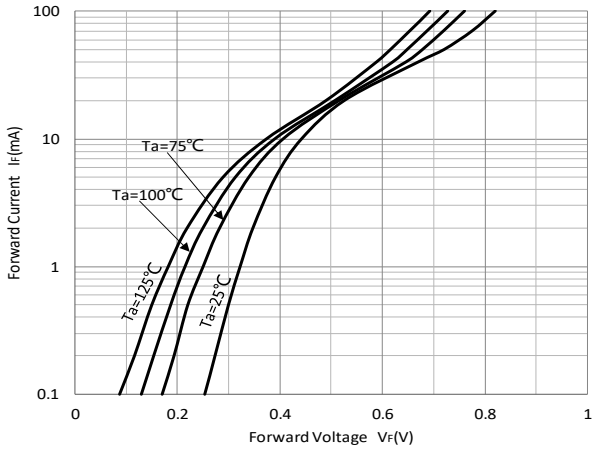
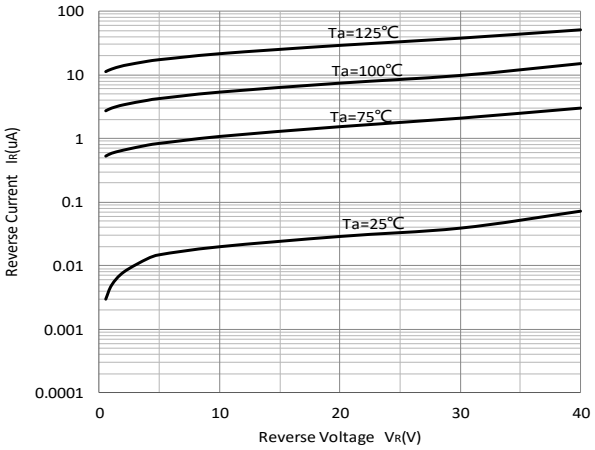


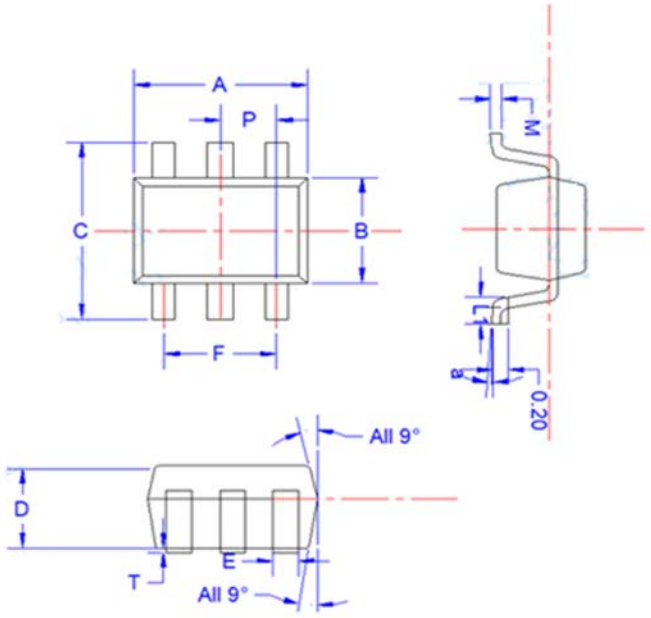
Fig 4：Typical Reverse Characteristics



■Ordering Information

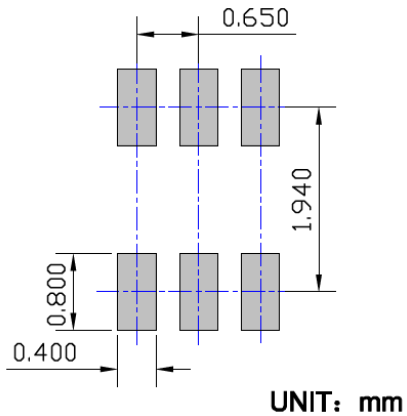
Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity (pcs)	Delivery mode
BAS70TWS THRU BAS70BRWS	F2	Approximate 0.009	3000	30000	120000	7” reel
BAS70TWS THRU BAS70BRWS	F3	Approximate 0.009	10000	/	210000	7” reel

■ 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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