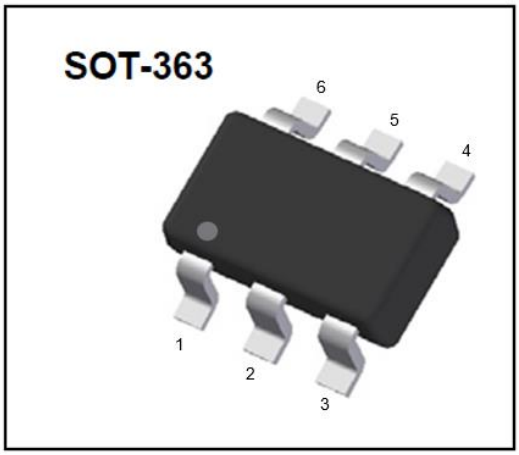
Schottky Barrier Diodes



Features

- We declare that the material of product compliance with RoHS requirements and Halogen Free
- Surface mount package ideally suited for automatic Insertion
- Moisture Sensitivity Level 1
- Reverse voltage：70 V
- Average forward current ：70mA

Application

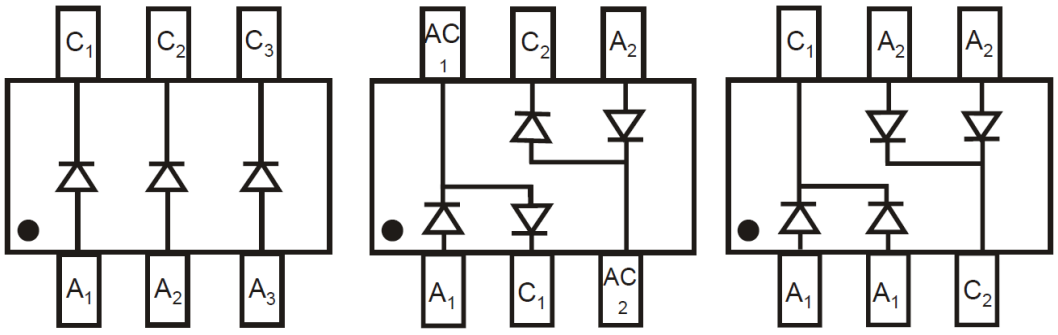
- Fast switching
- Low leakage current
- Low junction capacitance

Mechanical Data

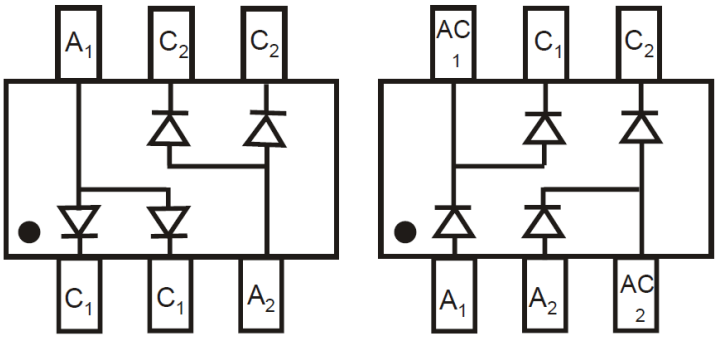
- **Package**: SOT-363
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking**:

BAS70TW	K73
BAS70DW-04	K74
BAS70DW-05	K71
BAS70DW-06	K76
BAS70BRW	K75

■Equivalent circuit



BAS70TW　　BAS70DW-04　　BAS70DW-05



BAS70DW-06　　BAS70BRW

■ Maximum Ratings (Ta=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V_{RRM}	V		70
Reverse voltage	V_R	V		70
Average forward current	I_{FAV}	mA		70
Non-repetetive peak forward surge current	I_{FSM}	A	tp≤10ms	0.1
Repetitive Peak Forward Current	I_{FRM}	A	tp=1ms，δ=0.25	0.07
Power dissipation	P_D	mW		200
Thermal Resistance Junction to Ambient Air	RθJA	℃/W		500
Maximum junction temperature	T_j	℃		-55 ~+125
Storage temperature range	T_{stg}	℃		-55 ~+125

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

PARAMETER	Symbol	UNIT	Conditions	Min	Max
Breakdown Voltage	V_R	V	I_R=10uA	70	
Forward Voltage	V_F	V	I_F=1mA		0.41
			I_F=15mA		1
Reverse Leakage Current	I_R	uA	V_R=50V		0.1
Capacitance	Cj	pF	V_R=1V,f=1MHz		2
Reverse Recovery Time	T_{RR}	ns	I_F=I_R=10mA，Irr=1mA		5

■ Electrical Characteristics (Typical)

Fig 1：P_D-Ta Curve

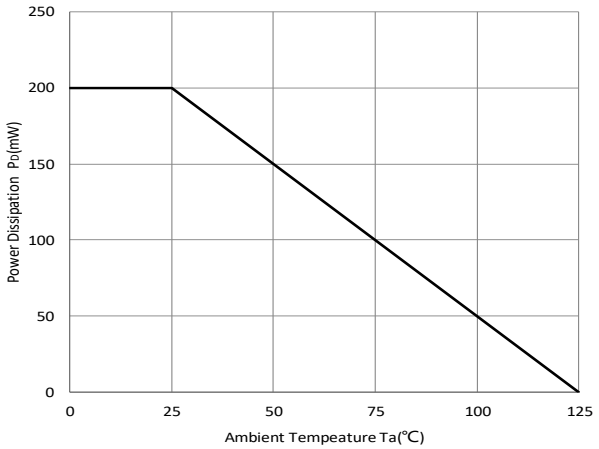


Fig 2：Capacitance Capability

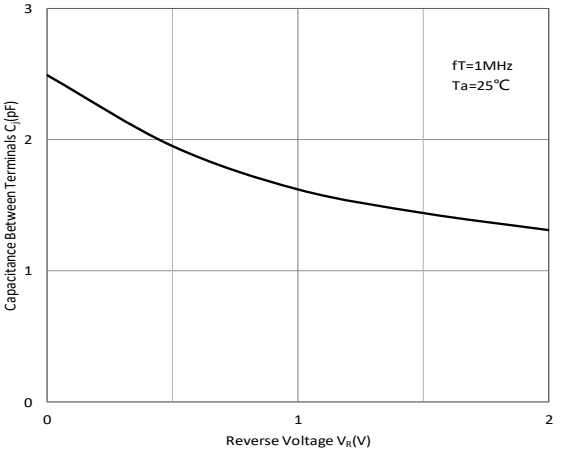


Fig 3：Typical Forward Characteristics

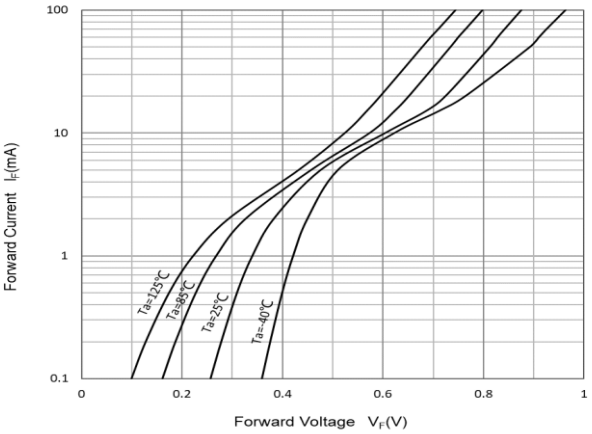
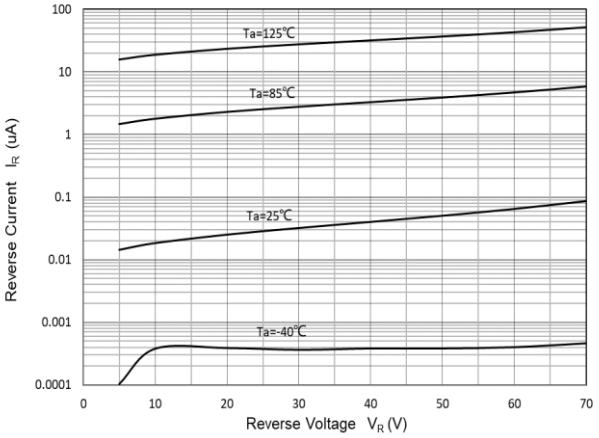


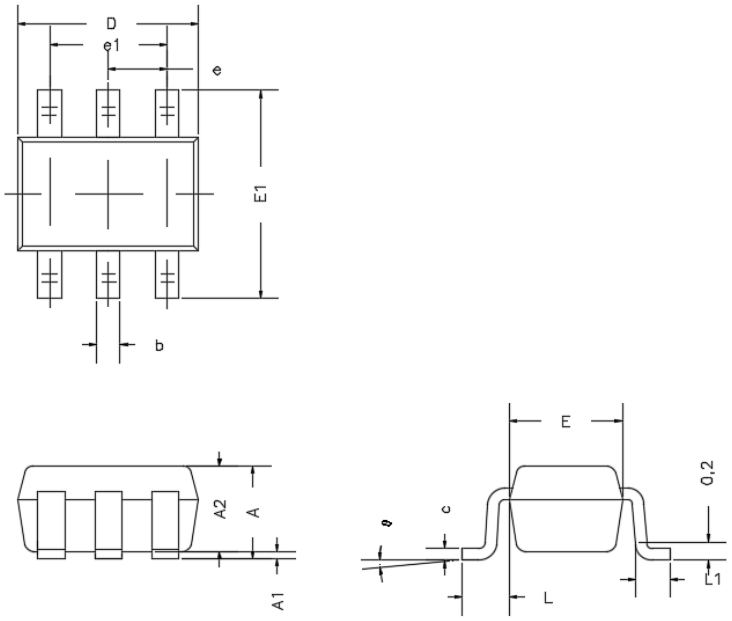
Fig 4：Typical Reverse Characteristics



■ Ordering Information (Example)

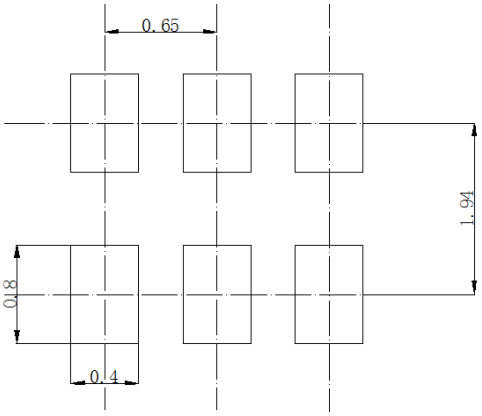
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS70TW	F2	Approximate 0.009g	3000	30000	120000	7" reel
BAS70DW-04	F2	Approximate 0.009g	3000	30000	120000	7" reel
BAS70DW-05	F2	Approximate 0.009g	3000	30000	120000	7" reel
BAS70DW-06	F2	Approximate 0.009g	3000	30000	120000	7" reel
BAS70BRW	F2	Approximate 0.009g	3000	30000	120000	7" reel

■SOT-363 Package Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MN	MAX
A	0.035	0.043	0.900	1.100
A1	0.000	0.004	0.000	0.100
A2	0.035	0.039	0.900	1.000
b	0.006	0.014	0.150	0.350
c	0.002	0.010	0.050	0.250
D	0.071	0.087	1.800	2.200
E	0.045	0.053	1.150	1.350
E1	0.085	0.096	2.150	2.450
e	0.026TYP		0.65TYP	
e1	0.047	0.055	1.200	1.400
L	0.021TYP		0.525TYP	
L1	0.010	0.018	0.260	0.460
θ	0°	8°	0°	8°

■SOT-363 Soldering Footprint



Unit： mm

Note:
1. All dimensions are in millimeters (mm) unless otherwise specified.
[所有尺寸均以毫米为单位，除非另有说明]
2. General tolerances: ±0.10mm unless otherwise specified.
[通用公差为±0.10mm，除非另有说明]
3. Dimensions and tolerances per ASME Y14.5M-2018.
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
4.All dimensions shown are exclusive of burrs and gate residues.
Burrs and gate vestiges shall not exceed 0.15 mm in maximum.
[所有尺寸均不包括毛刺和浇口残留。毛刺与浇口残留的尺寸最大不得超过 0.15mm]
5.Dimension b does not include dambar protrusion of max 0.100 mm per side.
[尺寸b不包括单边最大0.100 MM的中筋凸出部分]
6.Dimensions D and E are the overall extreme outer dimensions of the mold compound. These dimensions exclude mold flash, lead flash, protrusions and burrs but include the maximum allowable mold mismatch.
[D和E是塑封体的外部极限尺寸，不包括包封溢料、内引线溢料、凸出部分以及胶体毛刺，但是包含了包封错位的最大尺寸]
7.Formed leads shall be planar with respect to one another within a maximum of 0.076 mm relative to the seating plane.
[成型的管脚应为同一平面，共面性最大为0.1mm]

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