RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

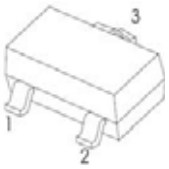
BAS70 -04/-05/-06

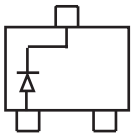
SWITCHING DIODE

FEATURES

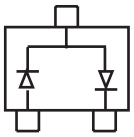
- Low turn-on voltage
- Fast switching
- Also available in lead free version

SOT-23

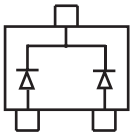




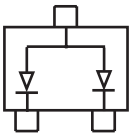
BAS70 Marking: 73



BAS70-04 Marking: 74

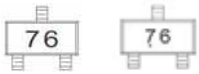


BAS70-05 Marking: 75



BAS70-06 Marking: 76

MARKING:

BAS70	BAS70-04	BAS70-05	BAS70-06
			

Solid dot = Green molding compound device,if none, the normal device.

MAXIMUM RATINGS @Ta=25℃

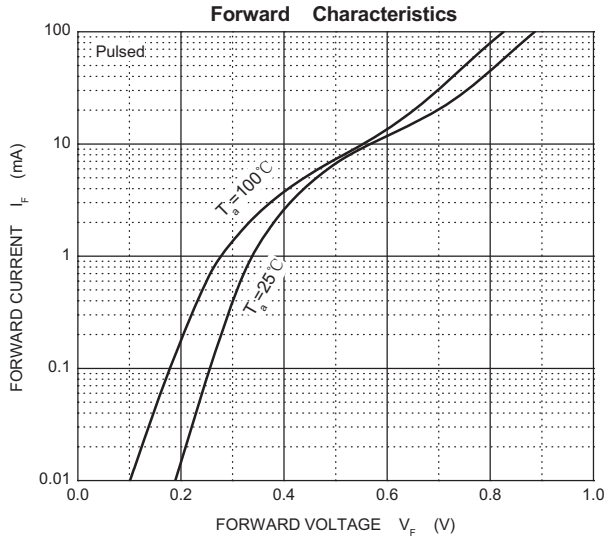
Symbol	Parameter	Value	Unit
V_R	DC Voltage	70	V
I_F	Forward Continuous Current	70	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ t = 8.3ms	100	mA
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	500	℃/W
T_J	Junction Temperature	-55~+150	℃
T_{stg}	Storage Temperature	-55~+150	℃

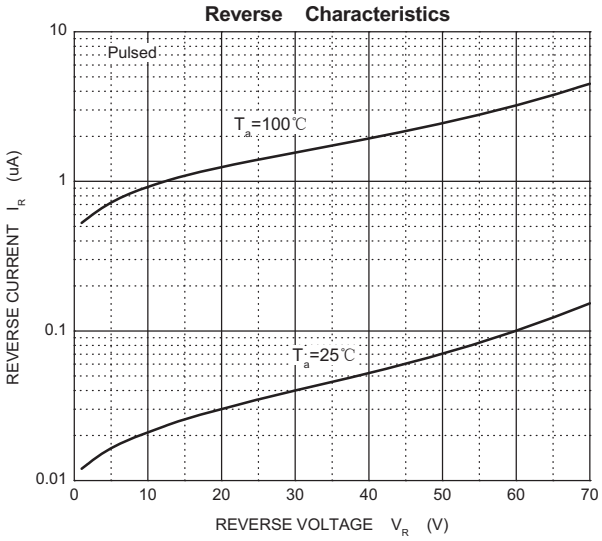
ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

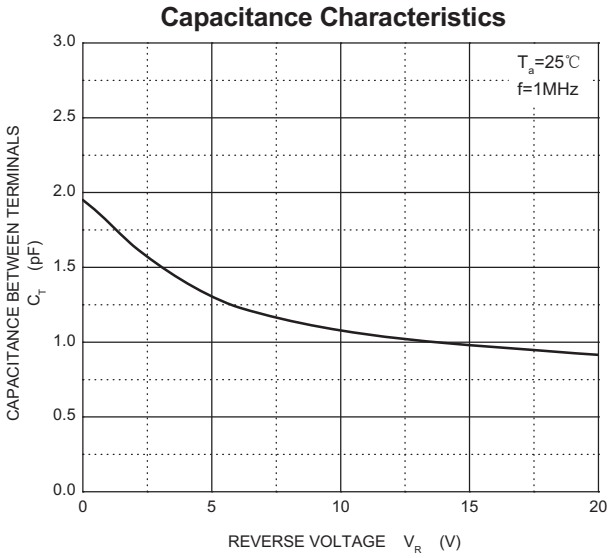
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R= 10μA	70		V
Reverse voltage leakag e current	I_R	V_R=50V		100	nA
Forward voltage	V_F	I_F=1mA I_F=15mA		410 1000	mV
Diode cap acitance	C_D	V_R=0V f=1MHz		2	pF
Reveres recovery time	t_{rr}	I_F=I_R=10mA,I_{rr}=0.1xI_R, R_L=100Ω		5	ns

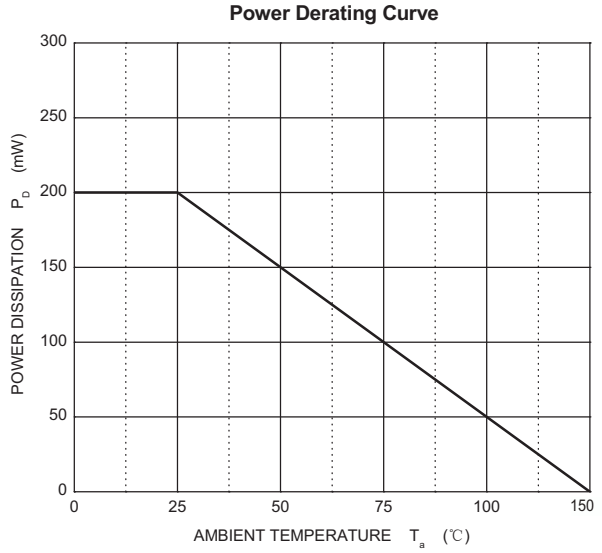
2020-11/02
REV:B

RATING AND CHARACTERISTICS CURVES (BAS70/-04/-05/-06)

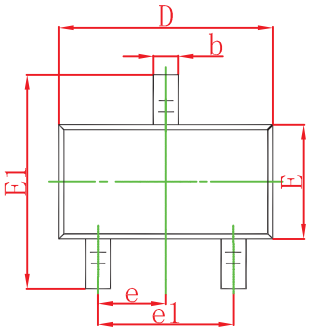


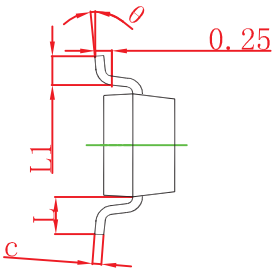


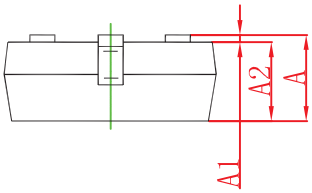




SOT-23 Package Outline Dimensions

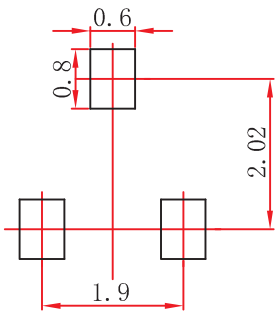






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 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°

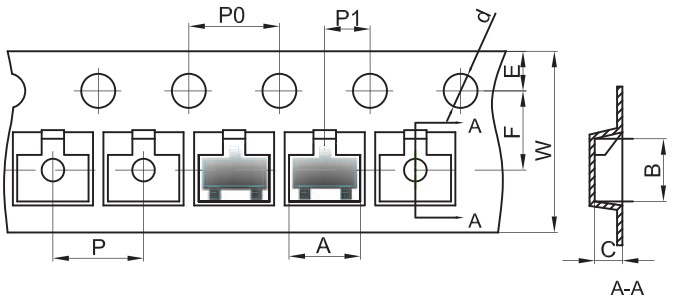
SOT-23 Suggested Pad Layout



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

SOT-23 Tape and Reel

SOT-23 Embossed Carrier Tape

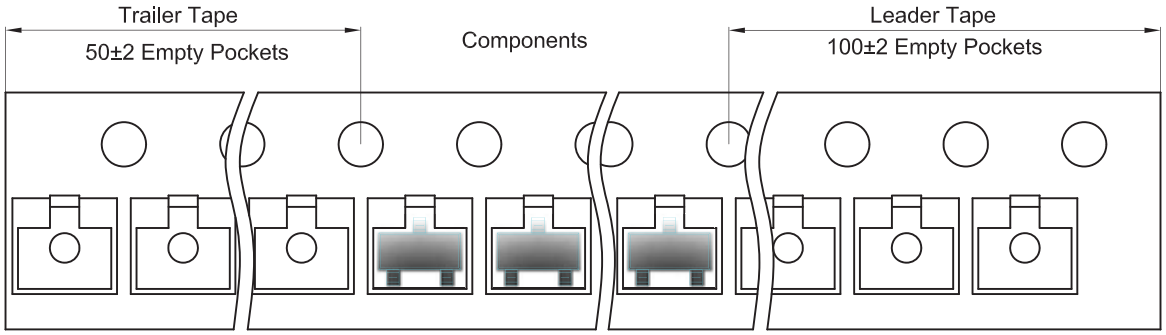


Packaging Description:

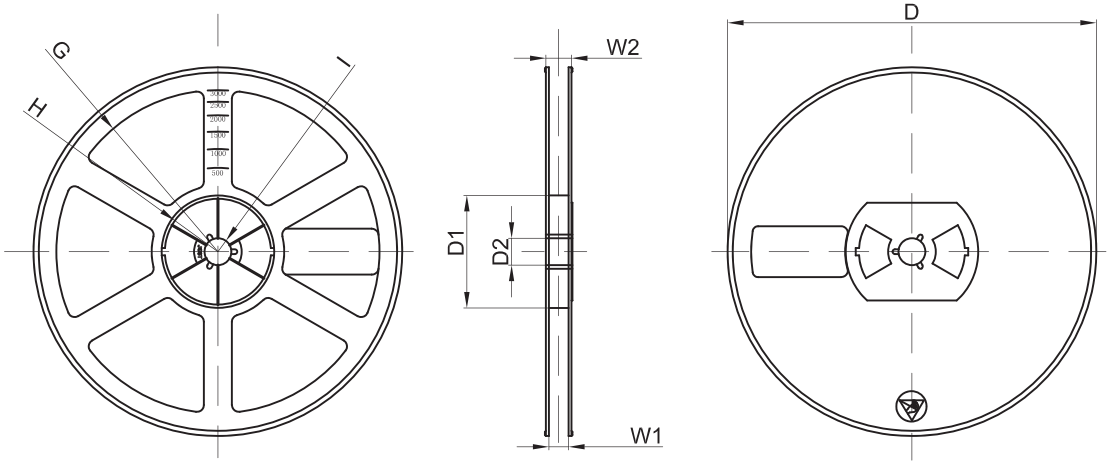
SOT-23 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer



SOT-23 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	

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