BAS70 SERIES

SURFACE MOUNT SCHOTTKY DIODES

| VOLTAGE | 70 Volts | CURRENT | 0.2 Amperes |

FEATURES

• Fast switching speed

• Surface mount package ideally suited for automatic insertion
  Electrical identical standard JEDEC

• Lead free in comply with EU RoHS 2002/95/EC directives.

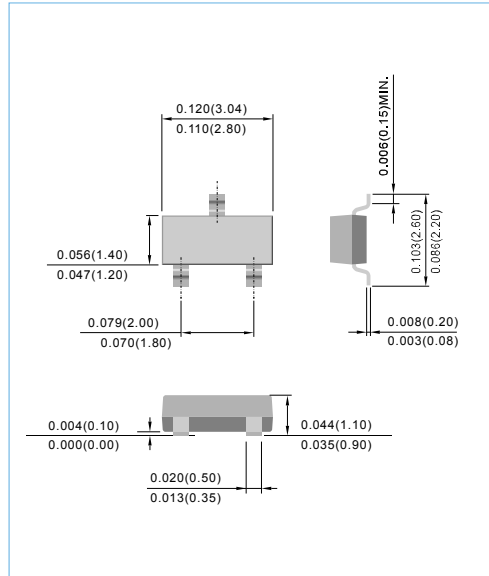• Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

Case: SOT-23, Plastic

Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.0003 ounces , 0.008 grams

**SOT-23**   Unit : inch(mm)

0.120(3.04)
0.110(2.80)
0.006(0.15)MIN.
0.056(1.40)
0.047(1.20)
0.103(2.60)
0.086(2.20)
0.079(2.00)
0.070(1.80)
0.008(0.20)
0.003(0.08)
0.004(0.10)
0.000(0.00)
0.044(1.10)
0.035(0.90)
0.020(0.50)
0.013(0.35)

ABSOLUTE RATINGS

Parameter	Symbol	Value	Units
Reverse Voltage	V_R	70	V
Peak Reverse Voltage	V_{RRM}	70	V
Average Rectified Current at Temp=25°C	$I_{F(AV)}$	0.2	A
Non-repetitive Peak Forward Surge Current at t=1.0 s	I_{FSM}	0.6	A

THERMAL CHARACTERISTICS

Parameter	Symbol	BAS70	BAS70A	BAS70C	BAS70S	Units
Marking code	-	A70	A72	A73	A74	-
Power Dissipation	P_D	225				mW
Thermal Resistance , Junction to Ambient (Note 1)	$R_{\theta JA}$	556				°C/W
Operating Junction Temperature	T_J	-55 to 150				°C
Operating Storage Temperature	T_{STG}	-55 to 150				°C
Circuit Configuration	-	SINGLE	COMMON ANODE	COMMON CATHODE	SERIES	-

Note : 1.Mounted on min pad conditions using FR-4 PCB

SINGLE   COMMON ANODE   COMMON CATHODE   SERIES

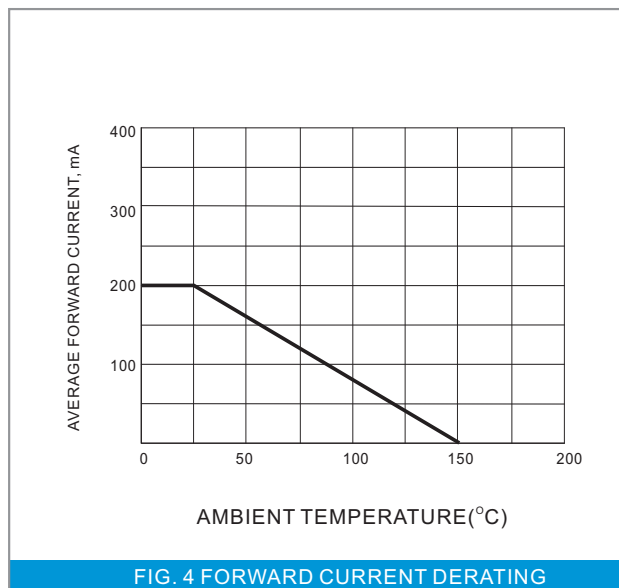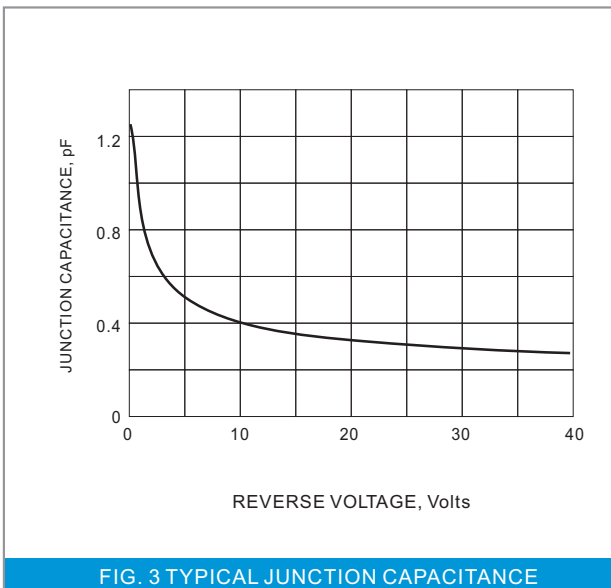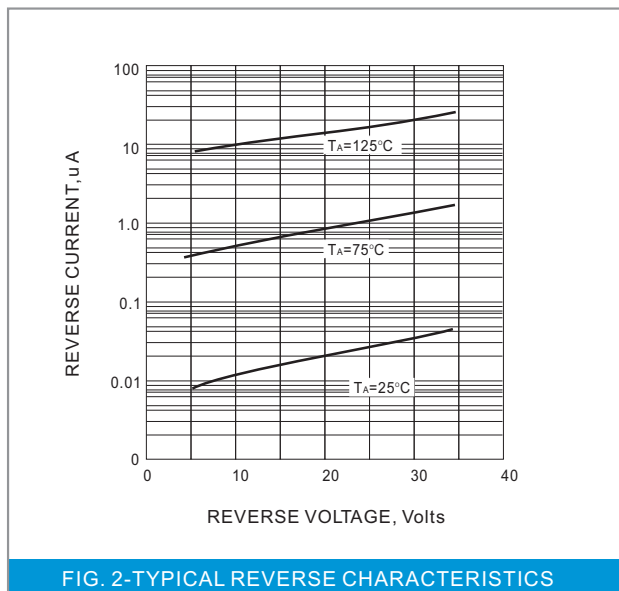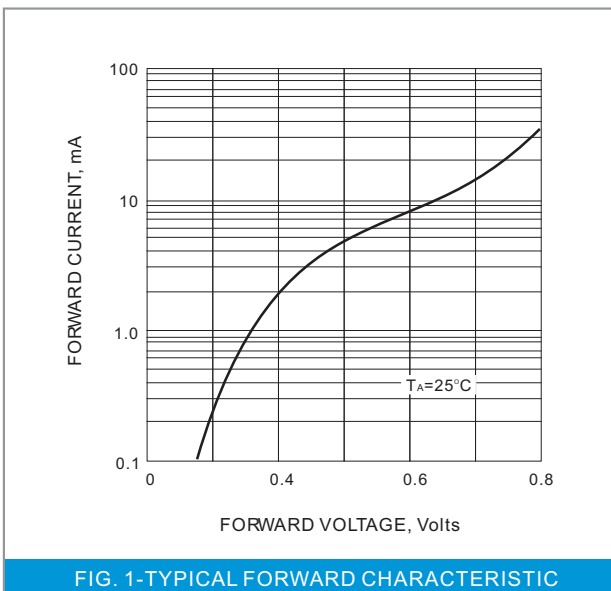FIG.14   FIG.15   FIG.16   FIG.17
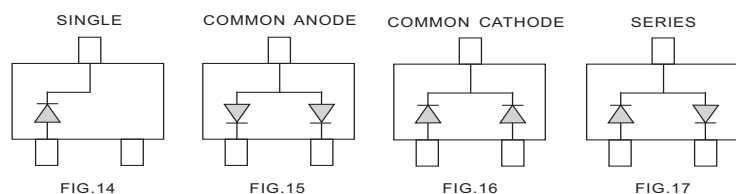
BAS70 SERIES

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	$V_{(BR)}$	I_R=10 uA	70	--	--	V
Reverse Current	I_R	V_R=70 V V_R=50 V	-- 	-- 	1.0 0.1	μA
Forward Voltage	V_F	I_F=1.0mA I_F=10mA I_F=15mA	-- 	-- 	0.41 0.75 1.00	V
Maximum Junction Capacitance	C_J	V_R=0V, f=1.0MHz	--	--	2.0	pF

ELECTRICAL CHARACTERISTICS CURVE

FIG. 1-TYPICAL FORWARD CHARACTERISTIC

FIG. 2-TYPICAL REVERSE CHARACTERISTICS

FIG. 3 TYPICAL JUNCTION CAPACITANCE

FIG. 4 FORWARD CURRENT DERATING

BAS70 SERIES

MOUNTING PAD LAYOUT

SOT-23   Unit : inch(mm)

0.035 MIN.
(0.90) MIN.

0.031 MIN.
(0.80) MIN.

0.037
(0.95)

0.043
(1.10)

0.078
(2.00)

0.043
(1.10)

0.106
(2.70)
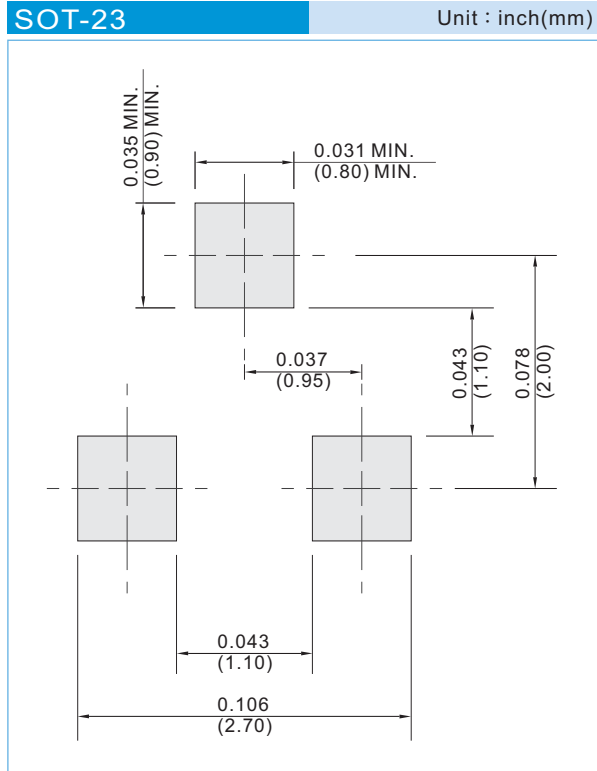
ORDER INFORMATION

• Packing information

   T/R - 12K per 13" plastic Reel

   T/R - 3K per 7" plastic Reel

BAS70 SERIES

Part No_packing code_Version

BAS70_R1_00001
BAS70_R2_00001

For example :

RB500V-40_R2_00001

Part No.

- Serial number
- Version code means HF
- Packing size code means 13"
- Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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