Schottky Barrier Diodes
70V 0.2W SOT-23 Single and Dual

BAS70-xx Series

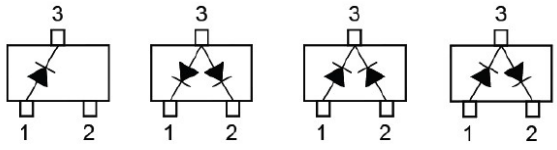
MERITEK

FEATURE

- Fast Switching Speed
- Low Forward Voltage
- Application: Reverse Polarity Protection, SMPS, DC-DC Converter

MECHANICAL DATA

- Case: SOT-23, Molded Plastic
- UL Flammability Classification Rating 94V-0



RoHS

ABSOLTE THERMAL RATINGS (TA=25°C unless otherwise noted)

Parameter	Symbol	BAS70	BAS70-04	BAS70-05	BAS70-06	Unit
Reverse Voltage	V_R	70				V
Peak Repetitive Reverse Voltage	V_{RRM}	70				V
Non-Repetitve Peak Reverse Voltage	V_{RSM}	70				V
Average Rectified Current	I_F	70				mA
Non-repetitve Peak Forward Surge Current at tp =10ms	I_{FSM}	100				mA
Total Power Dissipation	P_{TOT}	200				mW
Typical Thermal Resistance	$R_{\theta JA}$	625				°C/W
Junction Temperature	T_J	125				°C
Storage Temperature	T_{stg}	-65 ~ 150				°C

ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Parameter	Condition	Symbol	Min.	Max.	Unit
Reserve Breakdown Voltage	I_R= 10uA	V_{BR}	70	--	V
Forward Voltage	I_F = 1mA	V_F	--	410	mV
	I_F = 15mA		--	1000	
Reverse Current	V_R=50V	I_R	--	100	nA
Junction Capacitance	V_R=0V, f=1MHz	C_d	--	2	pF
Reverse Recovery Time	I_F= 10mA, R_L= 100 Ω I_R= 10mA~I_R= 1 mA	T_{rr}	--	5	nS

CHARACTERISTIC CURVES

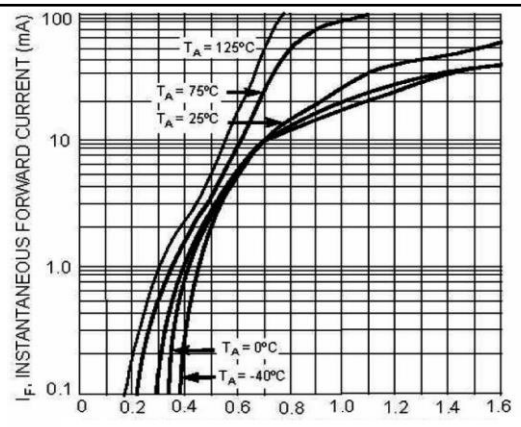


Fig. 1 Typical Forward Characteristics

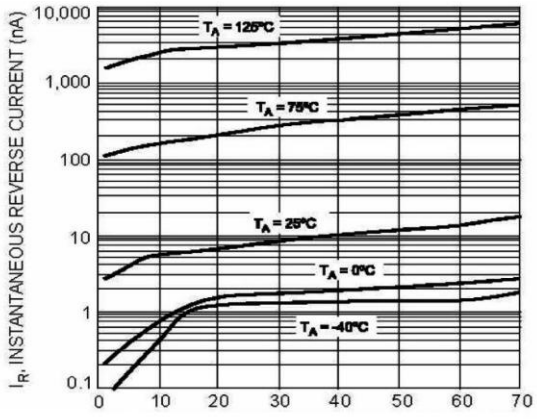
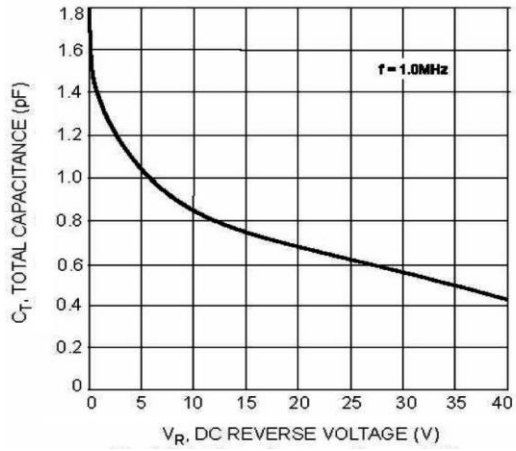
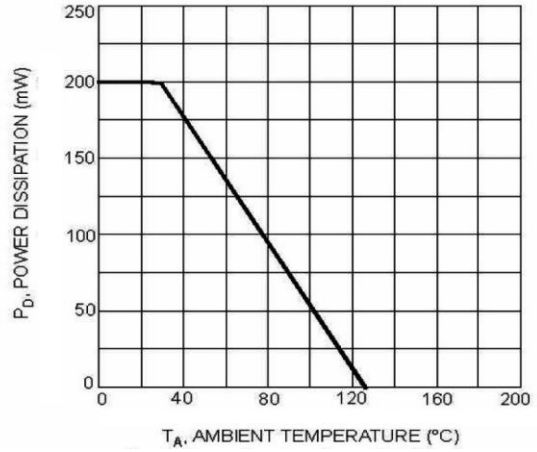


Fig. 2 Typical Reverse Characteristics





DIMENSIONS AND RECOMMENDED LAND PATTERN

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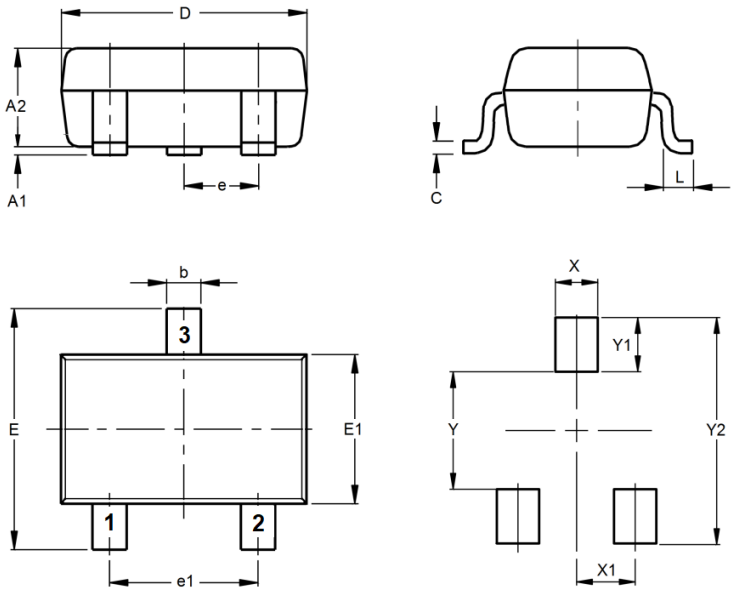
Item	Min (mm)	Max (mm)
A1	-	0.10
A2	0.79	1.30
b	0.30	0.50
C	0.08	0.20
D	2.70	3.10
e	--	--
e1	1.78	2.04
E	--	--
E1	1.20	1.60
L	0.15	-
X	0.80	0.80
X1	1.00	1.00
Y	1.50	1.50
Y1	1.00	1.00
Y2	2.90	2.90



*Specifications subject to change without notice.