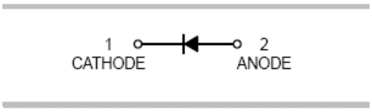
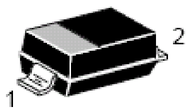
Schottky Barrier Diode **BAS40H**

FEATURES

Lead-free

- Small and flat lead SMD plastic package.
- Flat leades:excellent coplanarity and improved Thermal behavior.
- Low capacitance.
- High switching speed.
- Low leakage current.





SOD-123

APPLICATIONS

- Ultra high-speed switching.
- Voltage clamping.

ORDERING INFORMATION

Type No.	Marking	Package Code
BAS40H	AJ	SOD-123

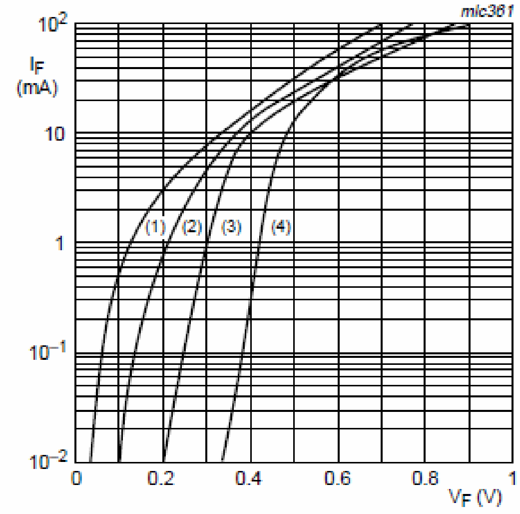
MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Parameter	**Symbol**	**Limits**	**Unit**
Forward Voltage@I_F=10mA	V_F	500	mV
Reverse Voltage	V_R	40	V
Forward Current	I_F	120	mA
Repetitive Peak Forward Current	I_{FRM}	120	mA
Non-repetitive Peak Forward Current	I_{FSM}	200	mA
Power Dissipation	P_d	375	mW
Storage and ambient temperature range	T_{amb},T_{stg}	-65 to+150	℃
Junction temperature	T_j	150	℃

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

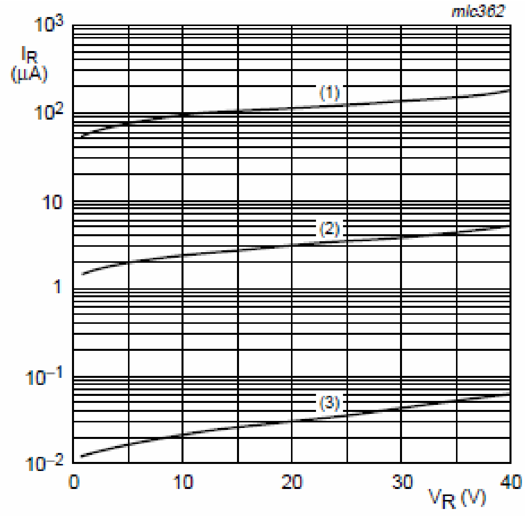
Parameter	**Symbol**	**Conditions**	**Min.**	**Typ.**	**Max.**	**Unit**
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R=10μA	40			V
Forward Voltage	V_F	I_F=1mA			0.38	V
	V_F	I_F=40mA			1.00	V
Reverse Current	I_R	V_R=30V			1	μA
		V_R=40V			10	μA
Diode Capacitance	C_d	V_R=0V,f=1MHz			5	pF

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified



(1) T_{amb} = 125 °C
(2) T_{amb} = 85 °C
(3) T_{amb} = 25 °C
(4) T_{amb} = −40 °C

Fig 1. Forward current as a function of forward Temperature

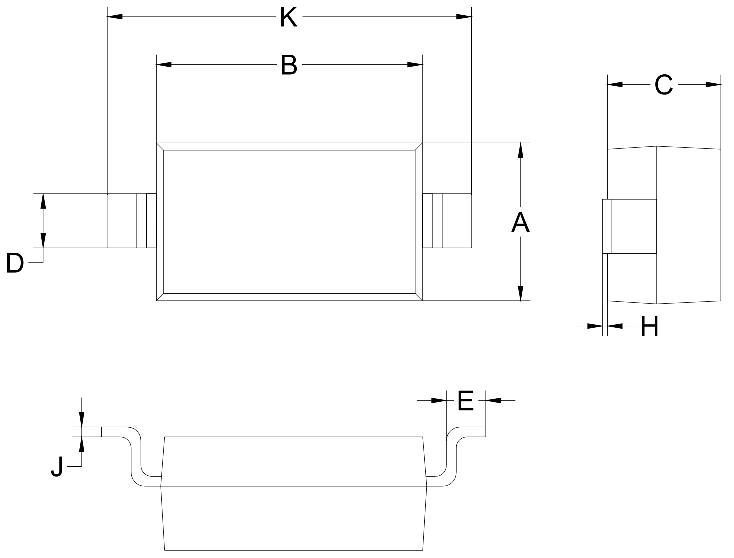


(1) T_{amb} = 125 °C
(2) T_{amb} = 85 °C
(3) T_{amb} = 25 °C

Fig 2. Reverse current as a function of junction voltage; typical values

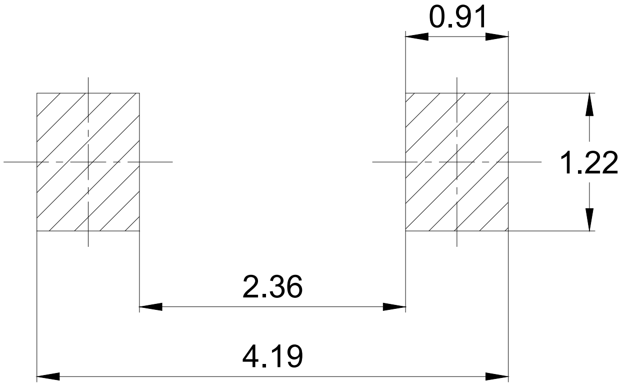
PACKAGE OUTLINE

Plastic surface mounted package SOD-123



SOD-123		
Dim	Min	Max
A	1.45	1.75
B	2.55	2.85
C	1.15 Typical	
D	0.55 Typical	
E	0.25	0.45
H	0.02	0.10
J	0.1 Typical	
K	3.55	3.85
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit：mm

PACKAGE INFORMATION

Device	Package	Shipping
BAS40H	SOD-123	3000/Tape&Reel