

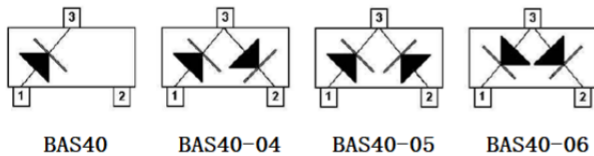
Features

- Epoxy meets UL-94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Low Forward Voltage
- Surface Mount device



SOT-23

Marking



BAS40	43
BAS40-04	44
BAS40-05	45
BAS40-06	46

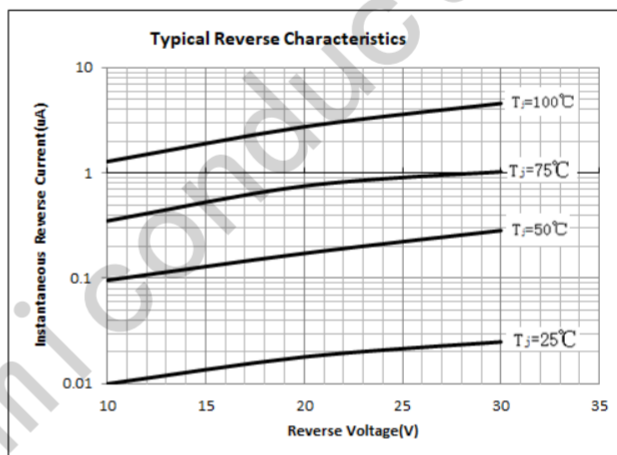
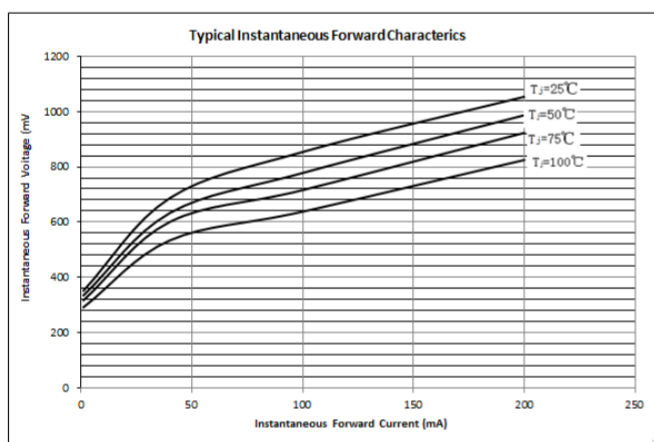
■ Maximum Rating, ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Value	Unit
Peak repetitive peak reverse voltage Working peak reverse voltage DC Blocking voltage	VRRM VRWM VR	40	V
Forward continuous current	IFM	200	mA
Power dissipation	PD	200	mW
Thermal resistance junction to ambient	R θ JA	500	$^{\circ}\text{C}/\text{W}$
Junction temperature	TJ	125	$^{\circ}\text{C}$

■ **Electrical Characteristics** ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

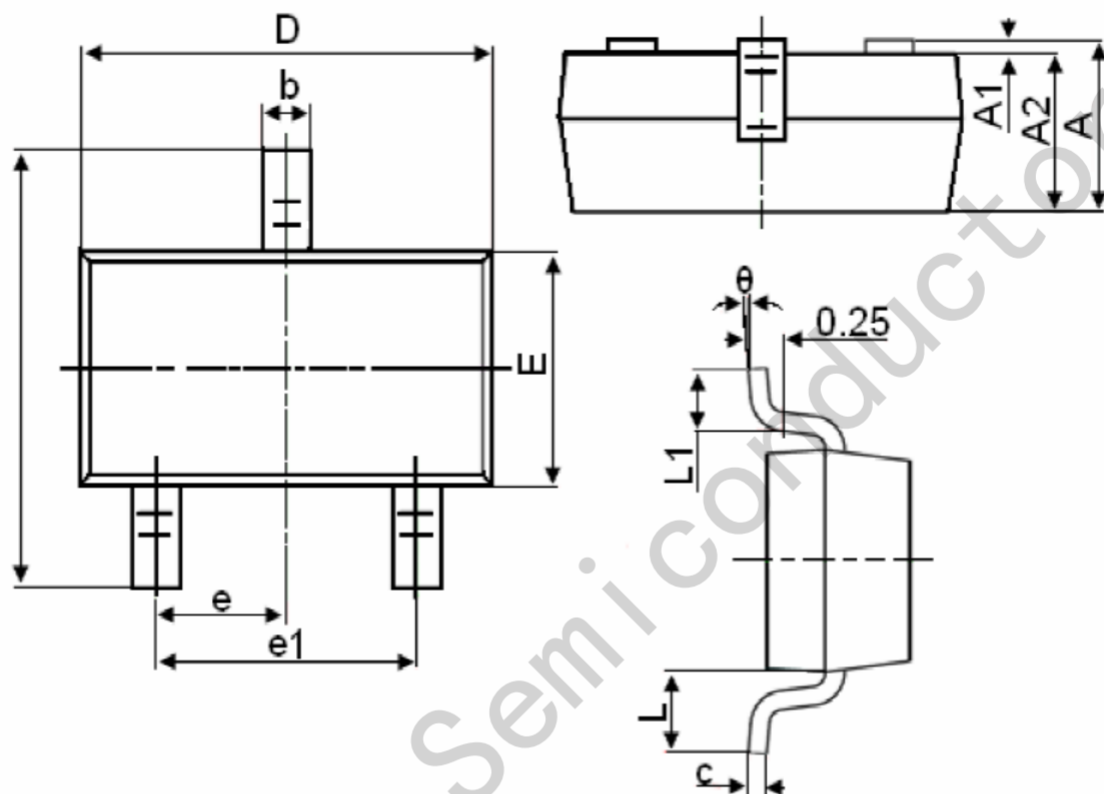
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	V(BR)	$I_R=10\mu\text{A}$	40		V
Reverse voltage leakage current	I_R	$V_R=30\text{V}$		200	nA
Forward voltage	V_F	$I_F=1\text{mA}$ $I_F=40\text{mA}$		380 1000	mV
Diode capacitance	C_j	$V_R=0\text{V}$ $f=1\text{MHz}$		5	pF
Reverse recovery time	t_{rr}	$I_{rr}=0.5\text{mA}$, $I_R=I_F=5\text{mA}$ $R_L=100\Omega$		5	ns

■ **Typical Characteristics**



Package Information

SOT-23



Symbol	Dimensions in Millimeters(mm)		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	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°