

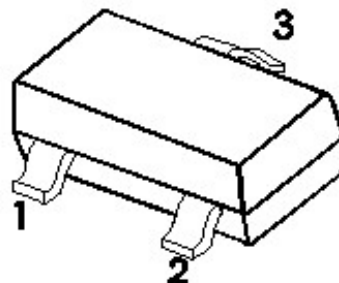
■ Features

- High Current Capability
- Low Forward Voltage Drop
- Extremely Fast Switching Speed

■ Mechanical Data

- package:SOT-23
- Flammability rating of epoxy resin: UL 94V-0
- Mounting Position: Any

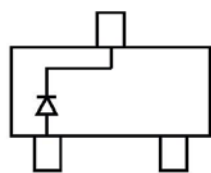
SOT-23



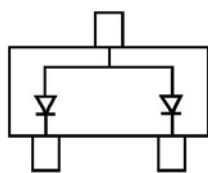
■ Ordering Information

Part Number	Package	Marking	Packing	Quantity per reel	Reel Size
BAS40	SOT-23	43	Tape & Reel	3000 PCS	7 inches
BAS40-06	SOT-23	46	Tape & Reel	3000 PCS	7 inches
BAS40-05	SOT-23	45	Tape & Reel	3000 PCS	7 inches
BAS40-04	SOT-23	44	Tape & Reel	3000 PCS	7 inches

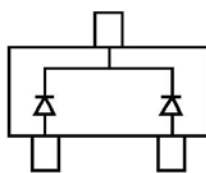
■ Pin Configuration



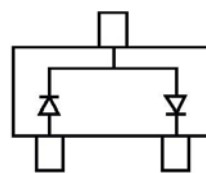
BAS40



BAS40-06



BAS40-05



BAS40-04

■ **Maximum Ratings & Thermal Characteristics**(Ratings at 25℃ ambient temperature unless otherwise specified.)

Parameters	Symbol	Limit	Unit
Maximum repetitive peak reverse voltage	VRRM	40	V
Maximum DC blocking voltage	VDC	40	V
Maximum average forward rectified current	IFM	200	mA
Typical thermal resistance	RθJA	500	℃/W
Power Dissipation	PD	200	mW
Junction Temperature	Tj	125	℃
Storage temperature range	TSTG	-50~+150	℃

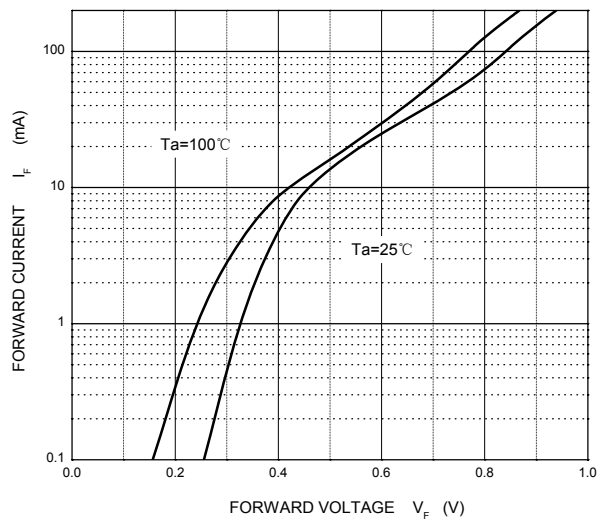
■ **Electrical Characteristics**(Ratings at 25℃ ambient temperature unless otherwise specified)

Parameters	Symbol	Test conditions	Min	Typ	Max	Unit
Maximum forward voltage	VF1	IF = 1mA			380	mV
	VF2	IF = 40mA			1000	
Maximum reverse breakdown voltage	VR	IR=10uA	40			V
Maximum reverse current	IR	VR=30V			200	nA
Type junction capacitance	CD	VR = 0V, f = 1MHz			5	pF
Reverse Recovery time	trr	IF=IR=10mA Irr=1XIR, RL=100 Ω			5	ns

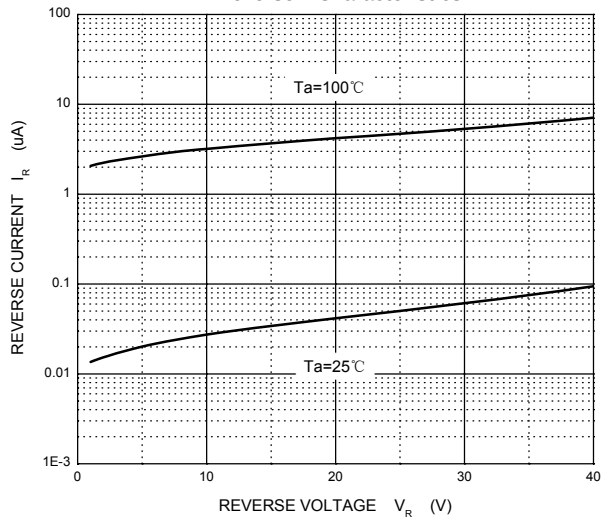


■ Typical Characteristics

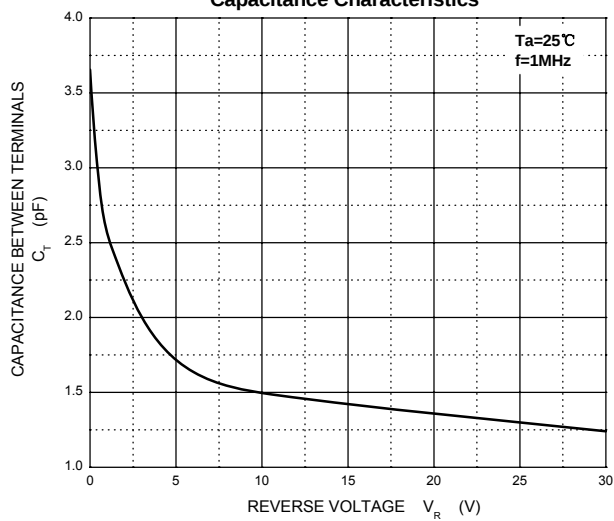
Forward Characteristics



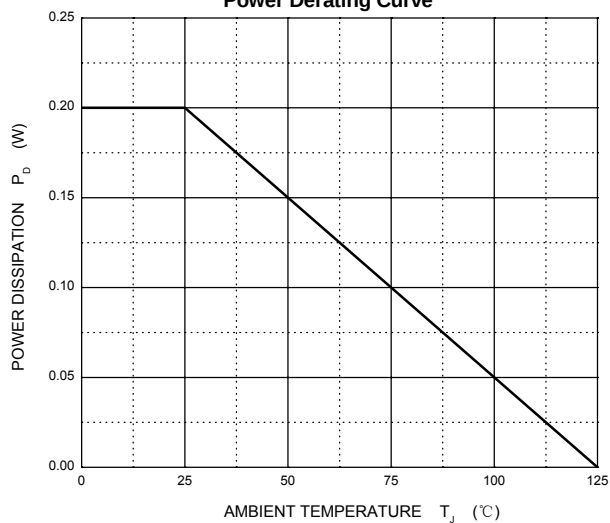
Reverse Characteristics



Capacitance Characteristics

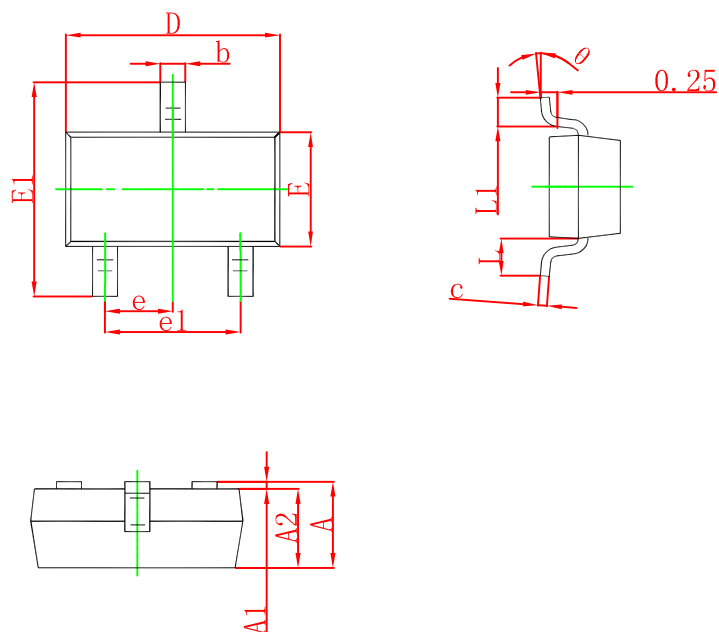


Power Derating Curve





■ SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters	
	Min	Max
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950 TYP	
e1	1.800	2.000
L	0.550 REF	
L1	0.300	0.500
θ	0°	8°