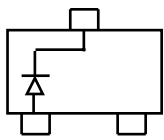
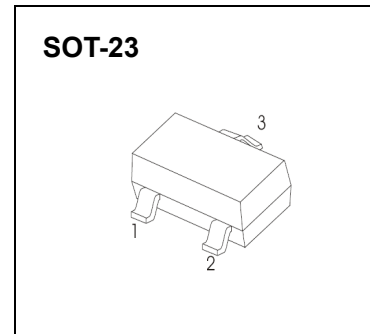
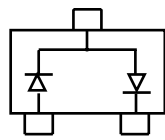


### FEATURES

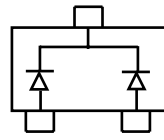
- Low turn-on voltage
- Fast switching
- Also available in lead free version
- Compliant to Halogen-free



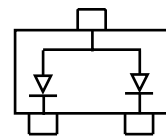
BAS70 Marking: 73



BAS70-04 Marking: 74



BAS70-05 Marking: 75



BAS70-06 Marking: 76

### MAXIMUM RATINGS @Ta=25°C

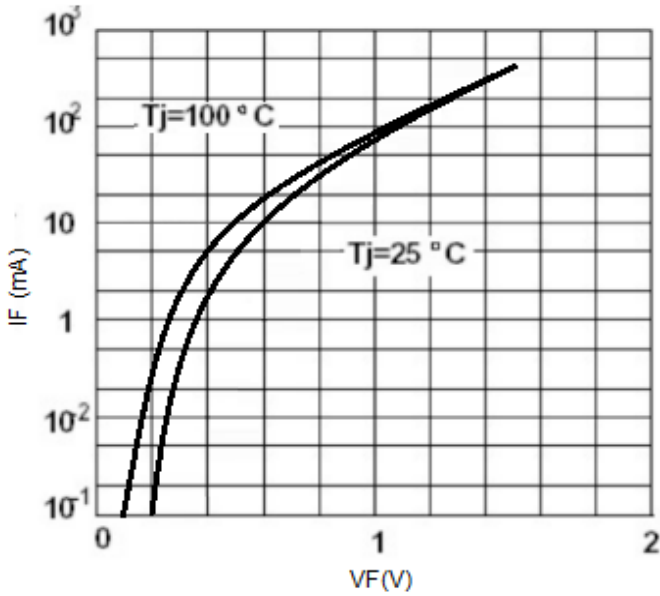
Symbol	Parameter	Value	Unit
$V_R$	DC Voltage	70	V
$I_F$	Forward Continuous Current	70	mA
$P_D$	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	500	°C/W
$T_J$	Junction Temperature	125	°C
$T_{stg}$	Storage Temperature	-55~+150	°C

### ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

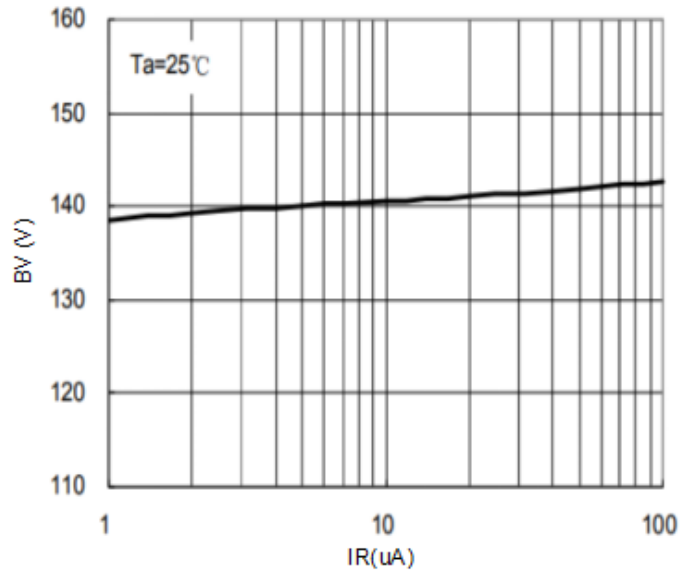
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 10\mu A$	70		V
Reverse voltage leakage current	$I_R$	$V_R = 50V$		120	nA
Forward voltage	$V_F$	$I_F = 1mA$ $I_F = 15mA$		410 1000	mV
Diode capacitance	$C_D$	$V_R = 0V$ $f = 1MHz$		2	pF
Reverse recovery time	$t_{rr}$	$I_F = I_R = 10mA, I_{rr} = 0.1 \times I_R,$ $R_L = 100\Omega$		5	ns

**Typical Characteristics**

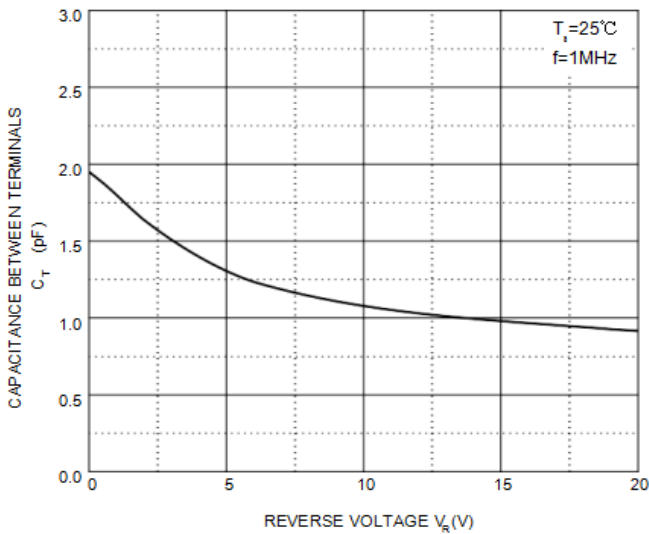
**Forward characteristics**



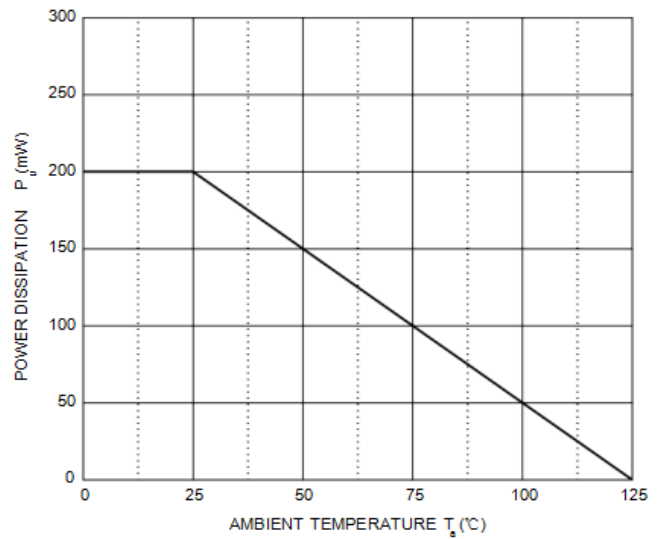
**Reverse characteristics**



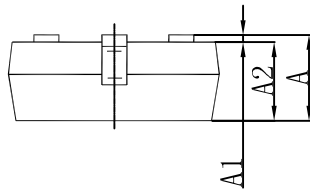
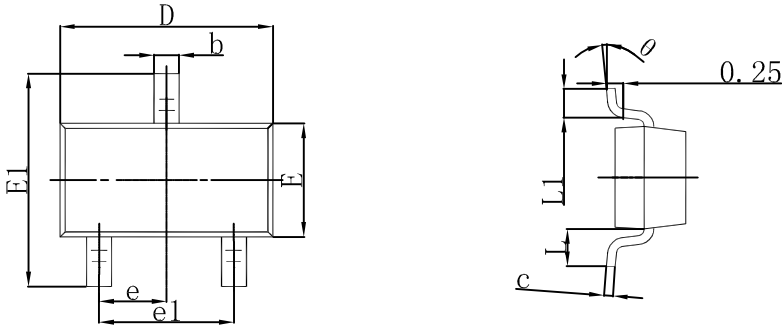
**Capacitance Characteristics**



**Power Derating Curve**

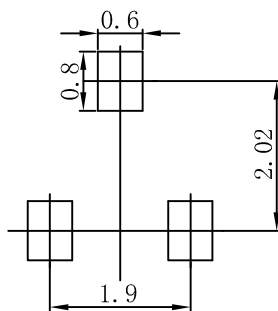


### SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		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	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	6°

### SOT-23 Suggested Pad Layout



- Note:
1. Controlling dimension: in millimeters.
  2. General tolerance:  $\pm 0.05\text{mm}$ .
  3. The pad layout is for reference purposes only.