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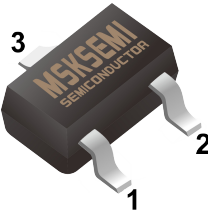
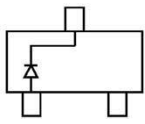
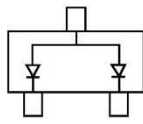
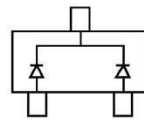
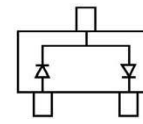
**BAS40W/-04/-05/-06**

**Product specification**

**FEATURES**

- Low Forward Voltage
- Fast Switching

**Reference News**

PACKAGE OUTLINE	BAS40W	BAS40W-06	BAS40W-05	BAS40W-04
				
	43	46	45	44
SOT-323	MARKING:43	MARKING:46	MARKING:45	MARKING:44

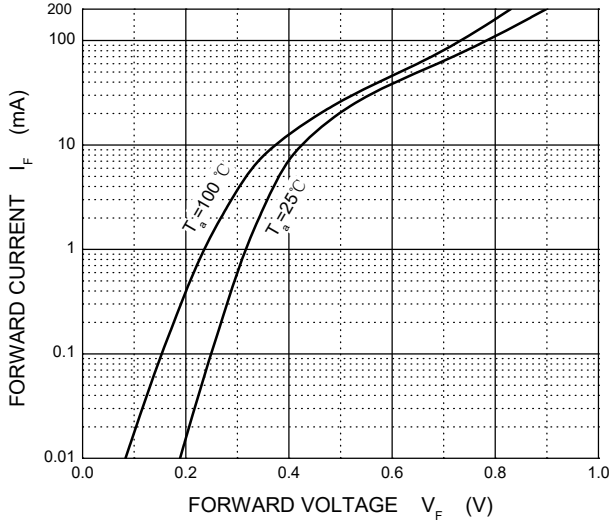
**Maximum Ratings @Ta=25°C**

Parameter	Symbol	Limit	Unit
Peak repetitive peak reverse voltage	$V_{RRM}$	40	V
Working peak reverse voltage	$V_{RWM}$		
DC blocking voltage	$V_R$		
Forward continuous current	$I_{FM}$	200	mA
Power dissipation	$P_D$	150	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	667	°C/W
Operating Junction Temperature Range	$T_J$	-40 ~ +125	°C
Storage Temperature Range	$T_{STG}$	-55 ~ +150	°C

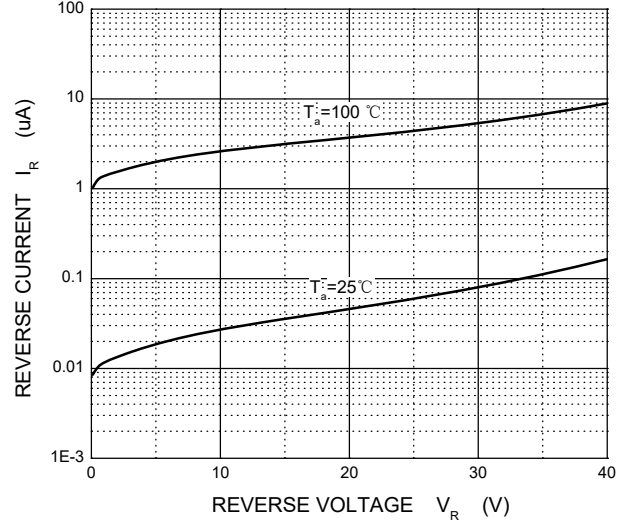
**ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)**

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

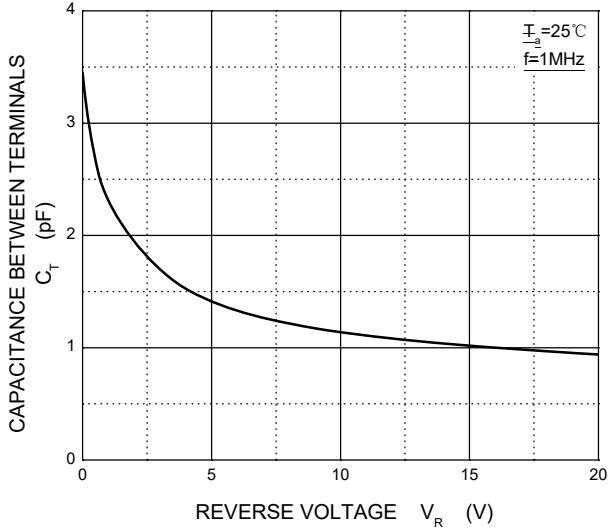
**Forward Characteristics**



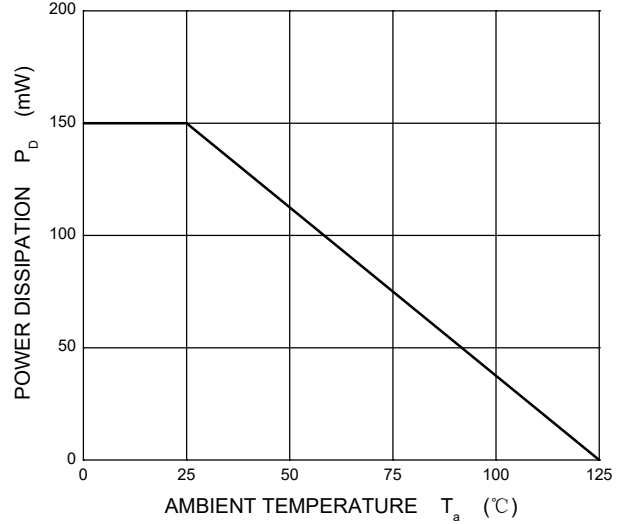
**Reverse Characteristics**



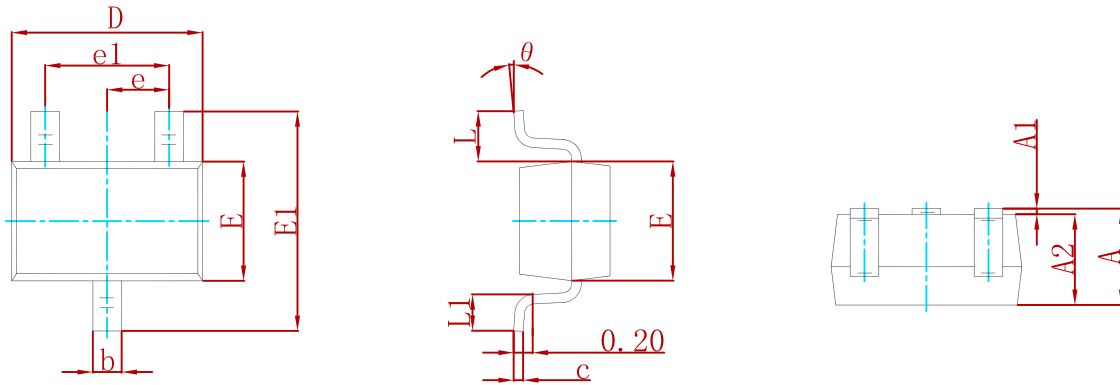
**Capacitance Characteristics**



**Power Derating Curve**

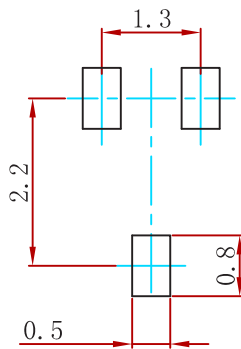


**PACKAGE MECHANICAL DATA**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

**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.

**REEL SPECIFICATION**

P/N	PKG	QTY
BAS40W/-04/-05/-06	SOT-323	3000

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