

MSKSEMI 美森科

SEMICONDUCTOR



ESD



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MOV



GDT



PLED

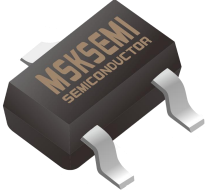
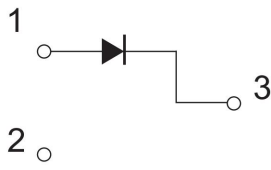
BAS19W/20W/21W

Product specification

FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

Reference News

PACKAGE OUTLINE	PIN CONFIGURATION	BAS19W	BAS20W	BAS21W
		KA8	KT2	KT3
SOT-323		MARKING:KA8	MARKING:KT2	MARKING:KT3

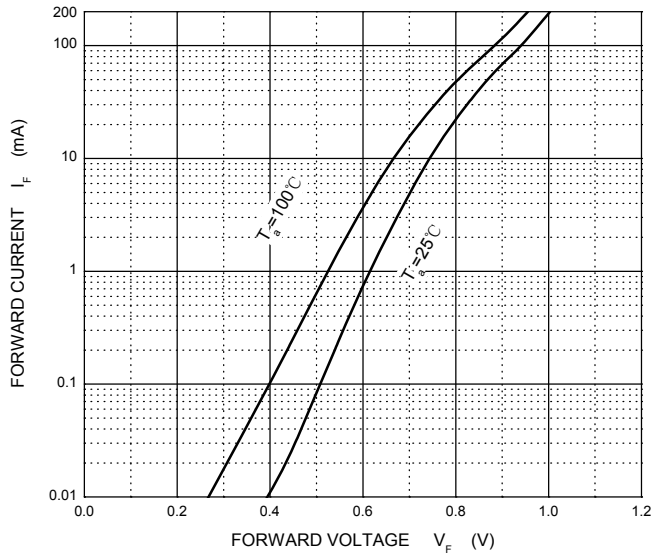
Maximum Ratings @Ta=25℃

Parameter	Symbol	BAS19W	BAS20W	BAS21W	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	100	150	250	V
DC Blocking Voltage	V_R				
Average Rectified Output Current	I_O	200			mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.5			A
Power Dissipation	P_D	200			mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625			℃/W
Operation Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150			℃

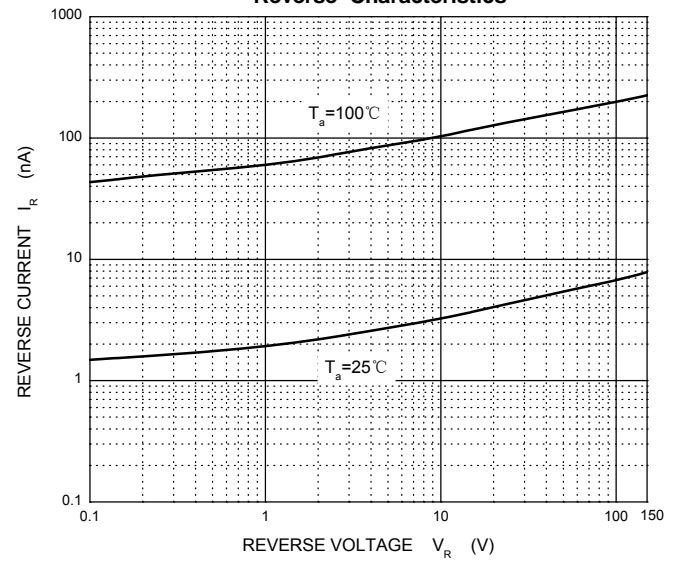
ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 100\mu A$	100 150 250		V
Reverse voltage leakage current	I_R	$V_R = 100V$ $V_R = 150V$ $V_R = 200V$		0.1	μA
Forward voltage	V_F	$I_F = 100mA$ $I_F = 200mA$		1 1.25	V
Diode capacitance	C_D	$V_R = 0V, f = 1MHz$		5	pF
Reveres recovery time	t_{rr}	$I_F = I_R = 30mA, I_{rr} = 0.1 \times I_R$		50	ns

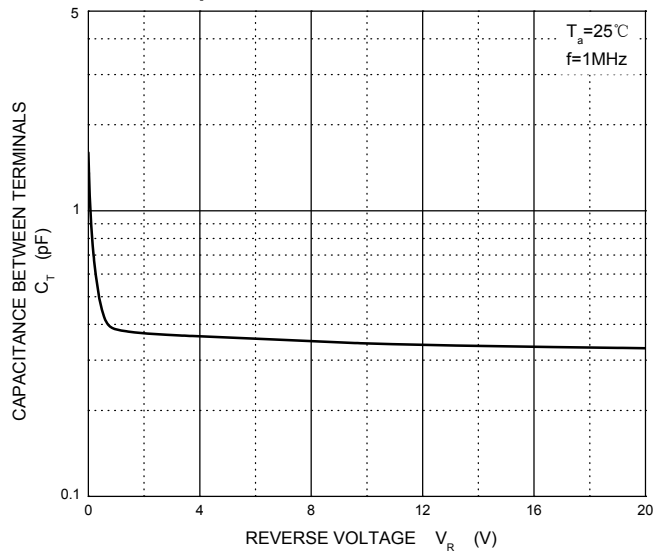
Forward Characteristics



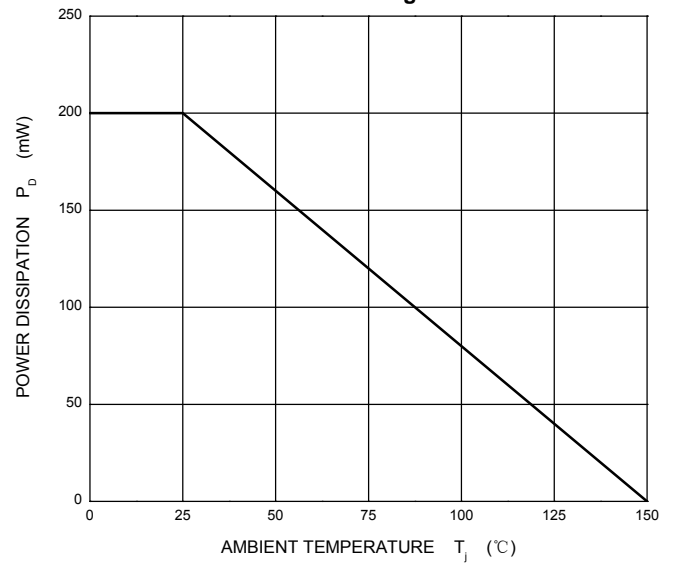
Reverse Characteristics



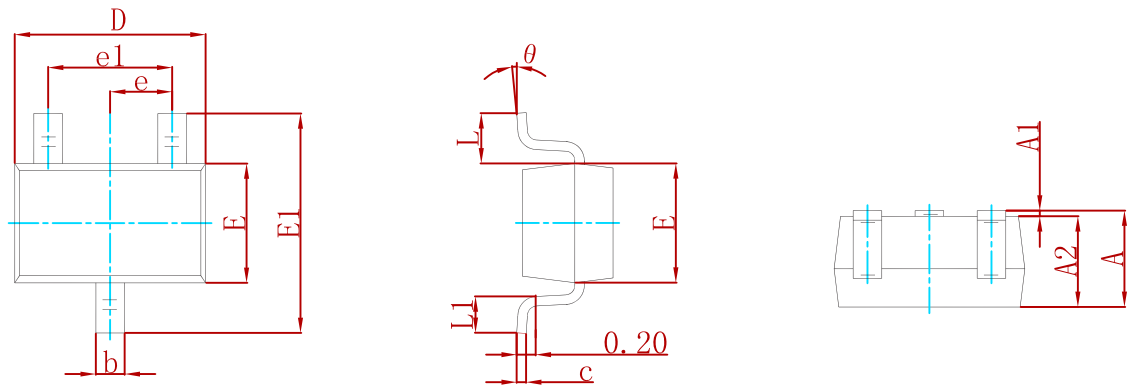
Capacitance Characteristics Per Diode



Power Derating Curve

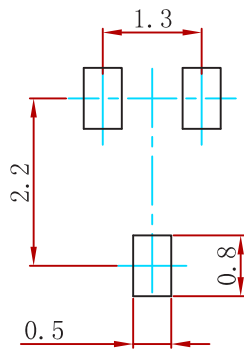


PACKAGE MECHANICAL DATA



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:±0.05mm.
3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
BAS19W/20W/21W	SOT-323	3000

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