BAS21/A/C/S

225mW Surface Mount Switching Diode-250V

FEATURES

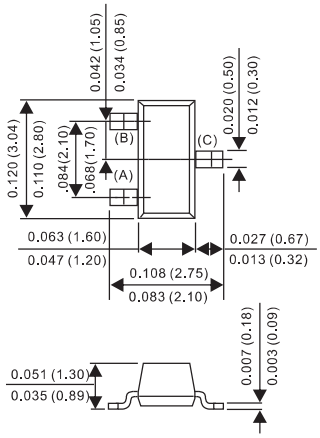
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance
- Compliant to Halogen-free

Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, SOT-23
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Mounting Position : Any

Package Outline

SOT-23



Dimensions in inches and (millimeters)

Maximum Ratings @Ta=25℃

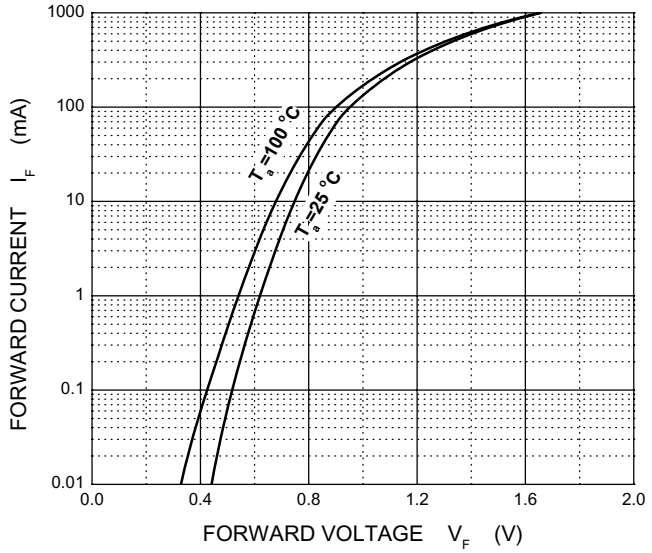
Parameter	Symbol	Limit	Unit
Repetitive peak reverse voltage **Working peak reverse voltage** **DC blocking voltage**	V_{RRM} V_{RWM} V_R	250	V
Forward continuous current	I_{FM}	400	mA
Average rectified output current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.5	A
Repetitive peak forward surge current	I_{FRM}	625	mA
Power dissipation	P_D	225	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	555	℃/W
Junction temperature	T_J	150	℃
Storage temperature range	T_{STG}	-55~+150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

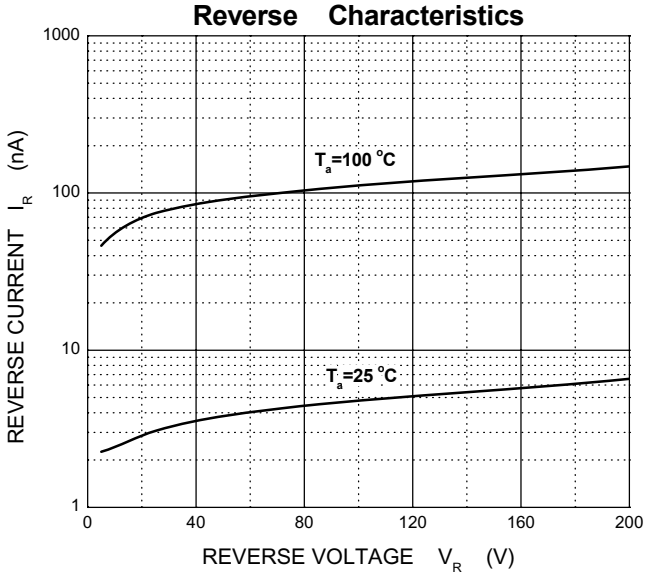
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R= 100μA	250		V
Reverse voltage leakage current	I_R	V_R=200V		0.1	μA
Forward voltage	V_F	I_F=100mA I_F=200mA		1000 1250	mV
Diode capacitance	C_D	V_R=0V, f=1MHz		5	pF
Reveres recovery time	t_{rr}	I_F=I_R=30mA,I_{rr}=0.1×I_R,R_L=100 Ω		50	ns

Rating and characteristic curves (BAS21/A/C/S)

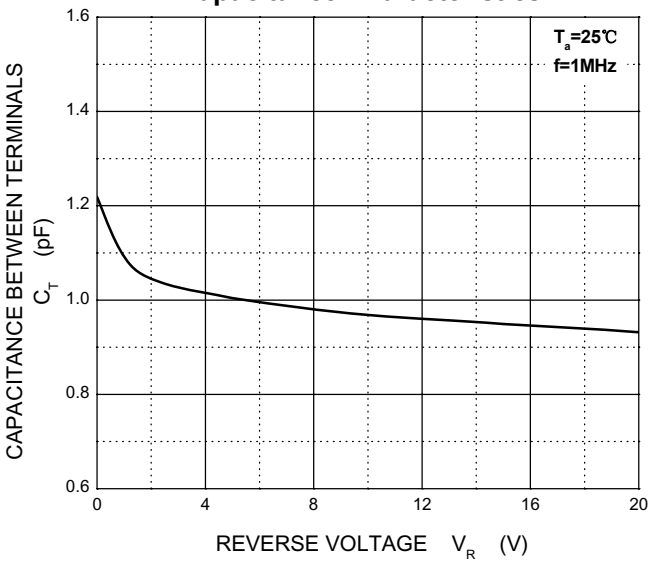
Forward Characteristics



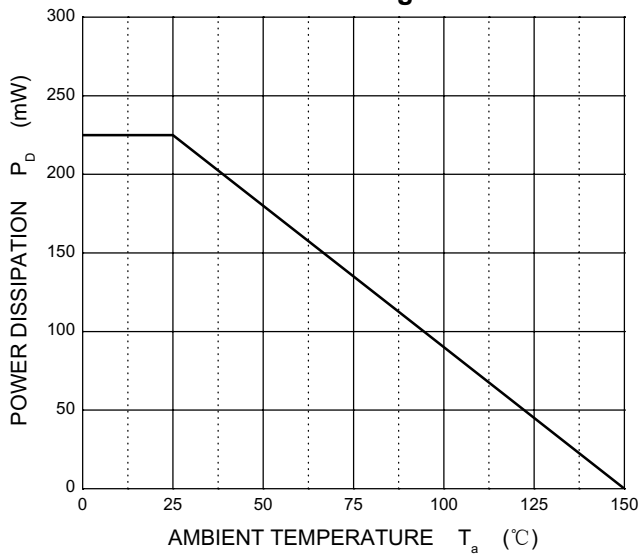
Reverse Characteristics



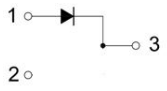
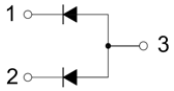
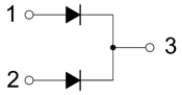
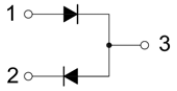
Capacitance Characteristics



Power Derating Curve



Pinning information

BAS21	BAS21A	BAS21C	BAS21S
			
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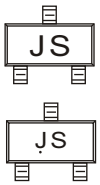
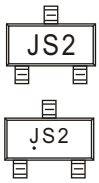
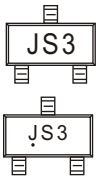
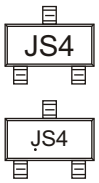
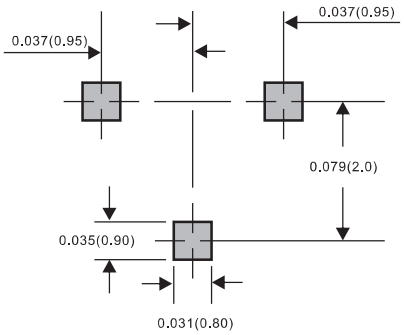
			

Suggested solder pad layout

SOT-23



Dimensions in inches and (millimeters)