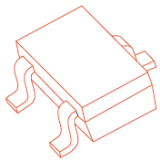
SOT-23 Plastic-Encapsulate Diodes

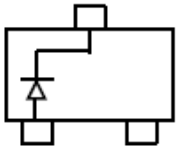
BAS21/A/C/S SWITCHING DIODE

SOT-23



FEATURES

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



BAS21
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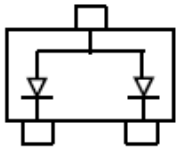

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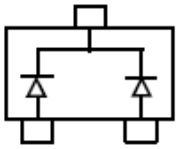

BAS21C
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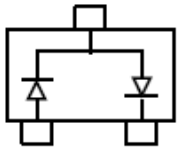

BAS21S
Marking:JS4

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 = 1.0μs @ t = 1.0s	I_{FSM}	2.5 0.5	A
Repetitive peak forward surge current	I_{FRM}	625	mA
Power dissipation	P_D	225	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	55	℃/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		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=100Ω		50	ns

Typical Characteristics

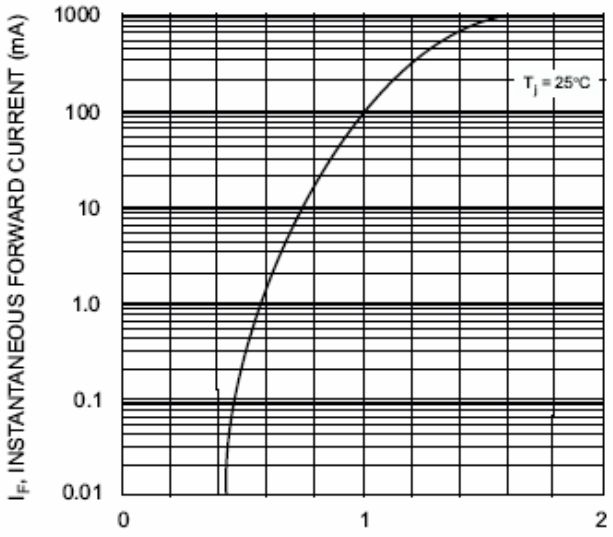

Fig. 1 Forward Characteristics

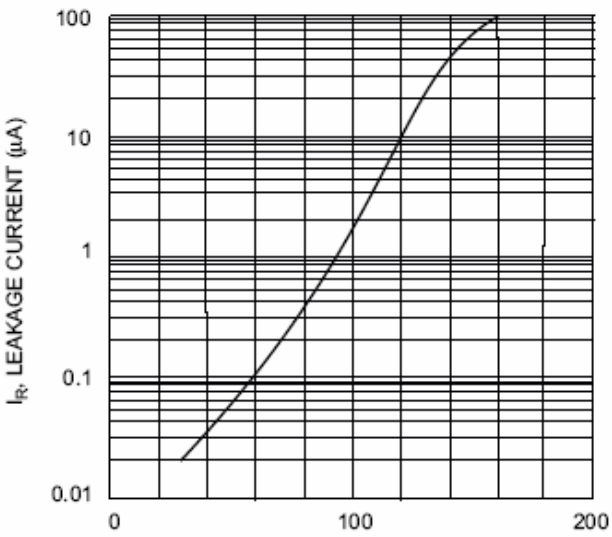

Fig. 2 Leakage Current vs Junction Temperature