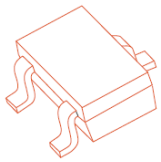
SOT-23 Plastic-Encapsulate DIODE

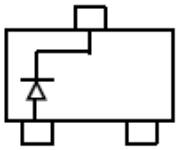
BAS21/A/C/S SWITCHING DIODE

SOT-23

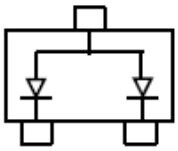


FEATURES

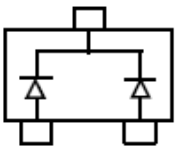
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



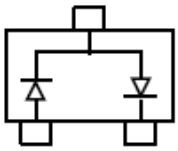
BAS21



BAS21A



BAS21C



BAS21S

Maximum Ratings @T_A=25℃

Parameter	Symbol	Limits	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 Air	$R_{\theta JA}$	**556**	℃/W
Junction temperature	T_J	**150**	℃
Storage temperature range	T_{STG}	**-65-150**	℃

ELECTRICAL CHARACTERISTICS (Tamb=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

BAS21/A/C/S

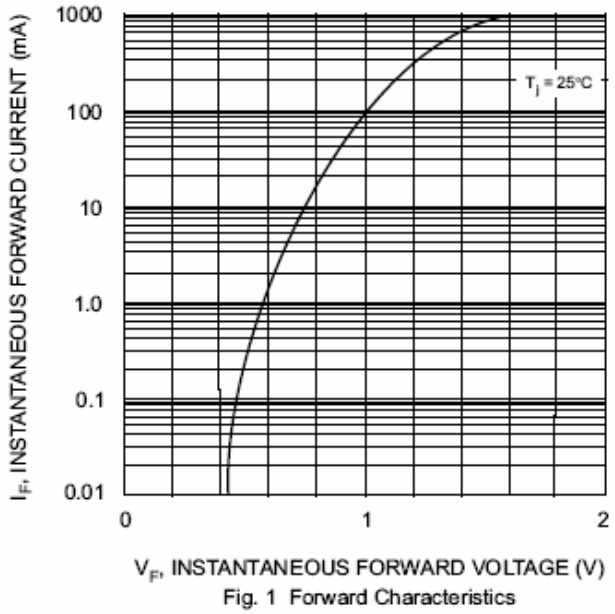


Fig. 1 Forward Characteristics

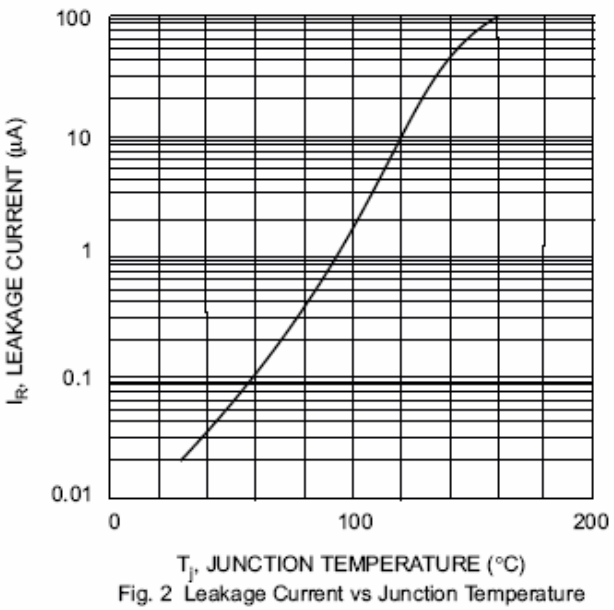


Fig. 2 Leakage Current vs Junction Temperature