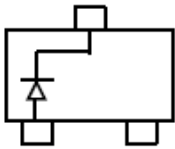
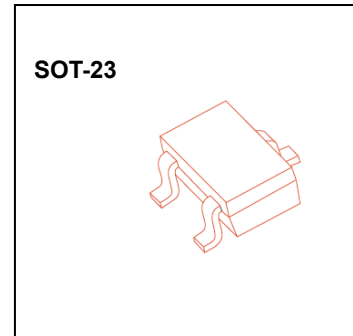




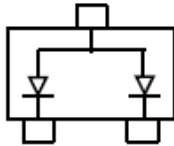
## SOT-23 Plastic-Encapsulate DIODE

**BAS21/A/C/S** SWITCHING DIODE**FEATURES**

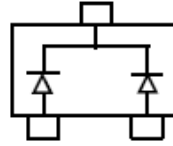
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



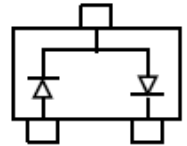
BAS21



BAS21A



BAS21C



BAS21S

**Maximum Ratings @T<sub>A</sub>=25°C**

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 m	A
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	°C/W
Junction temperature	$T_J$	150	°C
Storage temperature range	$T_{STG}$	-65-150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>amb</sub>=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 100\mu A$	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	$t_{rr}$	$I_F = I_R = 30mA, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$		50	nS

# Typical Characteristics

# BAS21/A/C/S

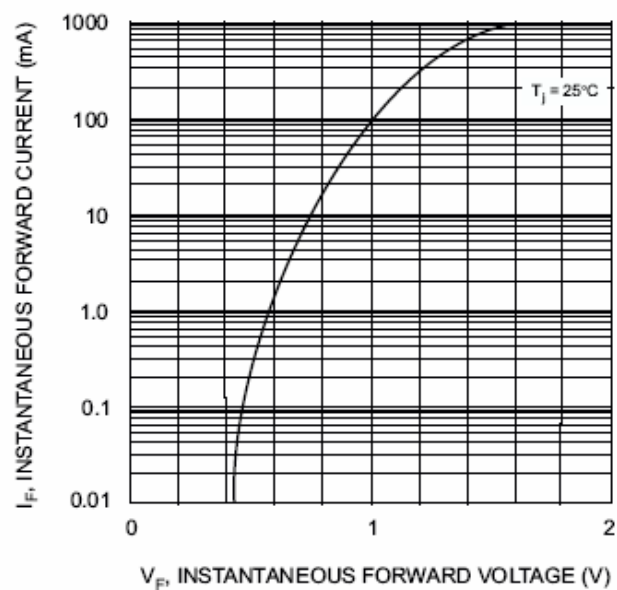


Fig. 1 Forward Characteristics

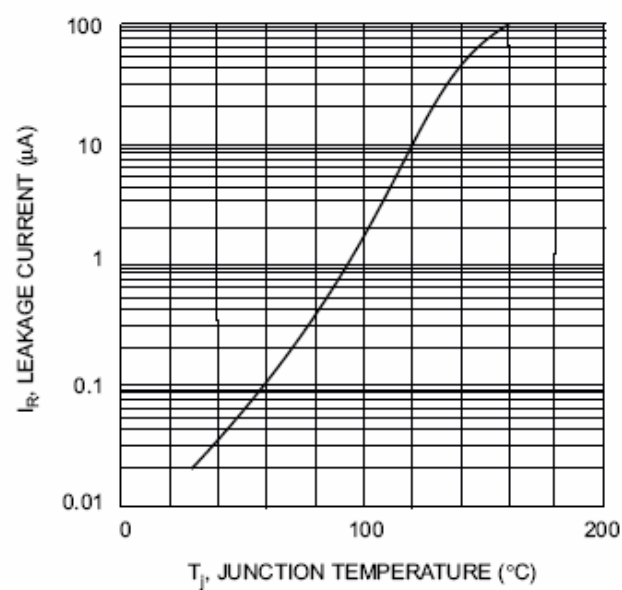


Fig. 2 Leakage Current vs Junction Temperature