

Features

- High Conductance
- Fast Switching Speed
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

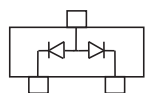
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number		Device Marking	
BAS21A		JS2	
BAS21C		JS3	
BAS21S		JS4	
Forward DC Current	I_{FM}	200mA	$T_A=25^\circ\text{C}$
Non-Repetitive Peak Forward Surge Current	I_{FSM}	2.5A 0.5A	@ $t = 1.0\mu\text{s}$ @ $t = 1\text{s}$
Power Dissipation	P_D	225mW	$T_A=25^\circ\text{C}$

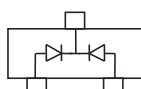
Electrical Characteristics @ 25°C Unless Otherwise Specified

Reverse Breakdown Voltage	V_{BR}	250V	$I_R=100\mu\text{A}$
Maximum Forward Voltage	V_F	1.10V	$I_{FM}=100.0\text{mA}$ $T_J=25^\circ\text{C}$
Maximum leakage current	I_R	1.0 μA	$V_R=200\text{V}$ $T_J=25^\circ\text{C}$
Diode Capacitance	C_D	5.0pF	$V_R=0.0\text{V}$, $f=1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	50.0ns	

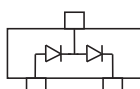
Internal Structure



BAS21A



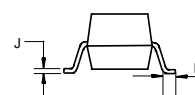
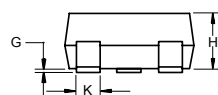
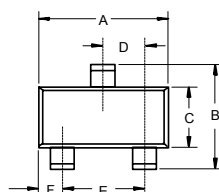
BAS21C



BAS21S

225mW 250Volt Switching Diode

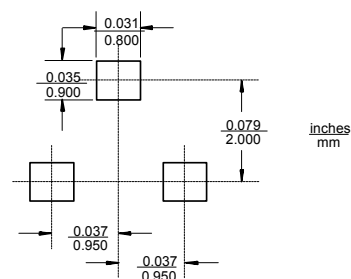
SOT-23



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.083	0.104	2.10	2.64	
C	0.047	0.055	1.20	1.40	
D	0.034	0.041	0.85	1.05	
E	0.067	0.083	1.70	2.10	
F	0.018	0.024	0.45	0.60	
G	0.0004	0.006	0.01	0.15	
H	0.035	0.043	0.90	1.10	
J	0.003	0.007	0.08	0.18	
K	0.014	0.020	0.35	0.51	
L	0.007	0.020	0.20	0.50	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

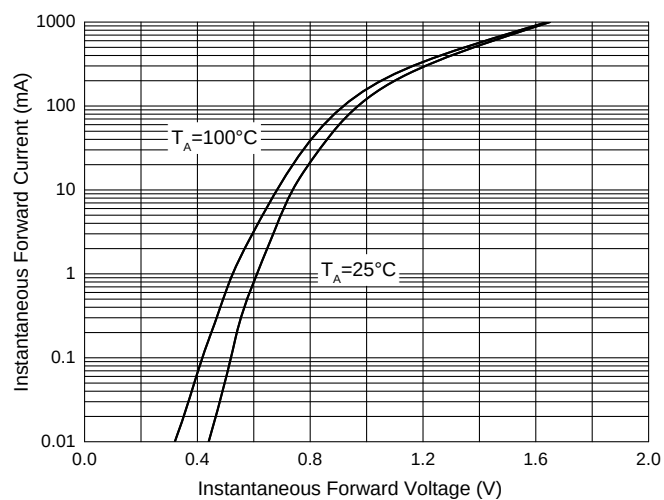


Fig. 2 - Typical Reverse Leakage Characteristics

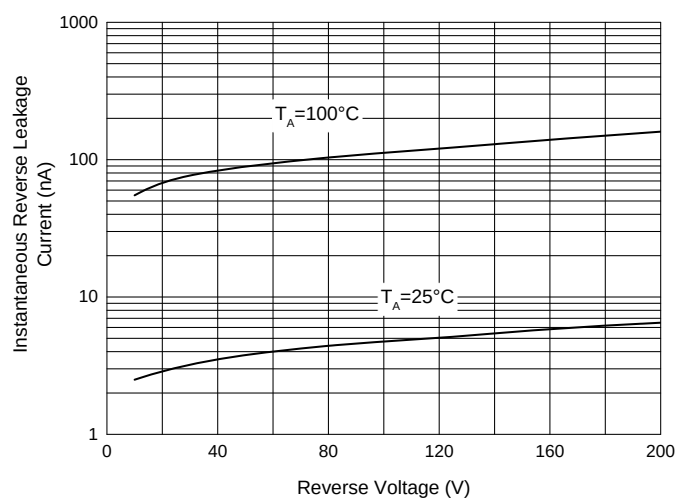
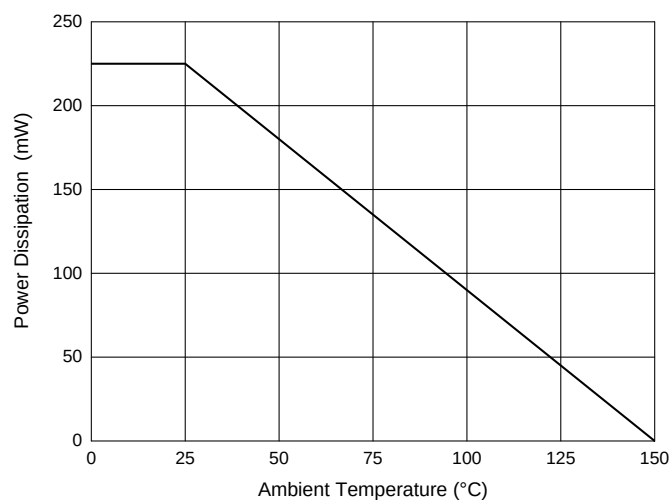


Fig. 3 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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