




Surface Mount Fast Switching Diode

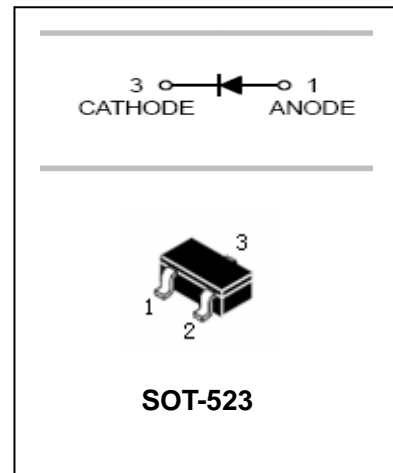
BAS21T

FEATURES

- Ultra-Small surface mount package.  Lead-free
- Fast switching speed.
- For general purpose switching applications.
- High conductance.

APPLICATIONS

- General purpose switching application.



ORDERING INFORMATION

Type No.	Marking	Package Code
BAS21T	T3	SOT-523

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units	
V_{RRM}	Peak repetitive reverse voltage	250	V	
V_{RWM}	Working peak reverse voltage	200		
V_R	DC reverse voltage	200		
$V_{R(RMS)}$	RMS reverse voltage	141	V	
I_O	Average rectified output current	200	mA	
I_{FRM}	Repetitive peak forward current	625	mA	
I_{FSM}	Non-repetitive peak forward surge current	@t=1.0μs	2.5	A
		@t=1.0s	0.5	
P_d	Power dissipation	150	mW	
$R_{\theta JA}$	Thermal resistance junction to ambient	833	°C/W	
T_j, T_{stg}	Junction and Storage Temperature	-65 to +150	°C	

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

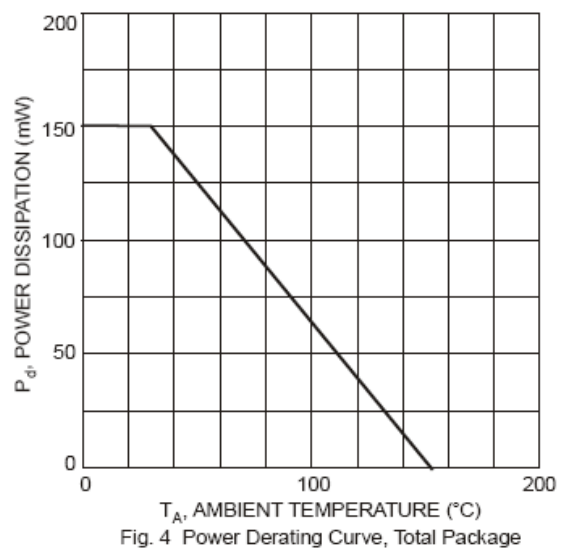
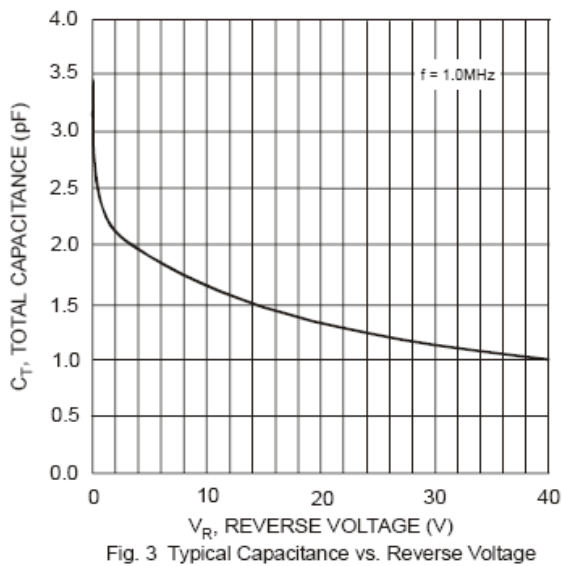
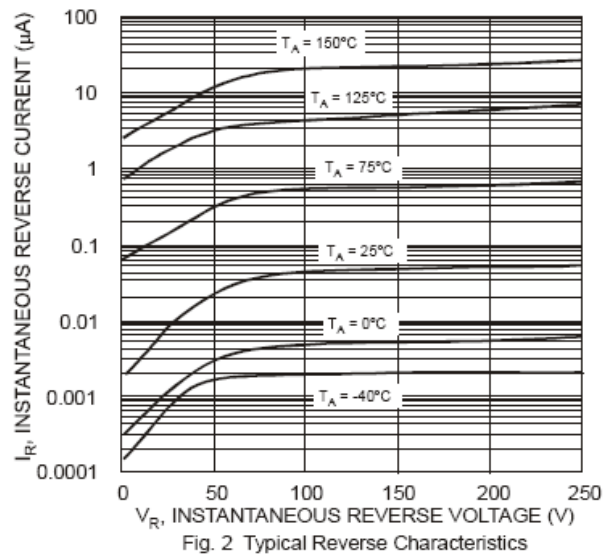
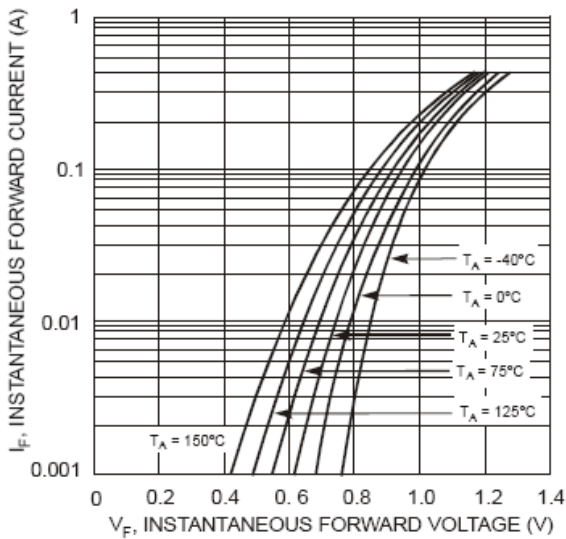


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Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$	250		V
Leakage current	I_R	$V_R=200V, T_j=25^\circ C$ $V_R=200V, T_j=100^\circ C$		100 15	nA μA
Forward voltage	V_F	$I_F=100mA$ $I_F=200mA$		1.0 1.25	V
Typical total capacitance	C_T	$V_R=0V, f=1MHz$		5.0	pF
Reverse recovery Time	t_{rr}	$I_F=I_R=30mA, I_{rr}=0.1 \cdot I_R, R_L=100\Omega$		50	ns

TYPICAL CHARACTERISTICS @ $T_a=25^\circ C$ unless otherwise specified



PACKAGE OUTLINE



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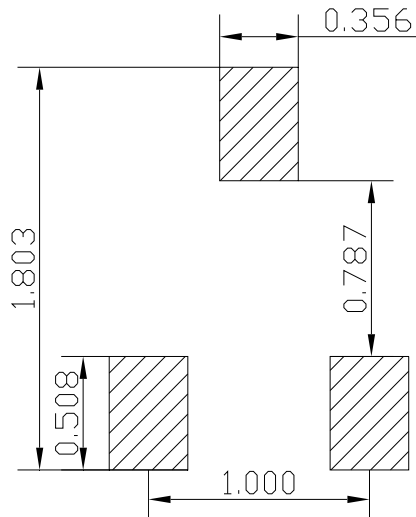
Plastic surface mounted package

SOT-523

SOT-523		
Dim	Min	Max
A	1.5	1.7
B	0.75	0.85
C	0.6	0.8
D	0.15	0.3
G	0.9	1.1
H	0.02	0.1
J	0.1Typical	
K	1.45	1.75

All Dimensions in mm

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
BAS21T	SOT-523	3000/Tape&Reel