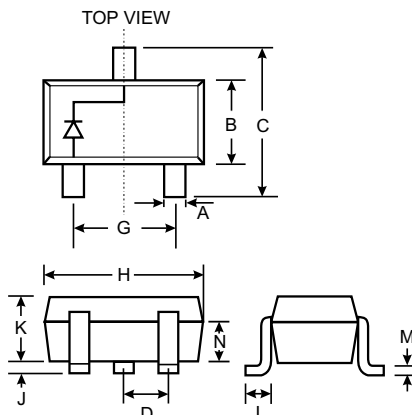


Features

- Ultra-Small Surface Mount Package
- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

Mechanical Data

- Case: SOT-523, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Marking: T3
- Weight: 0.002 grams (approx.)



SOT-523			
Dim	Min	Max	Typ
A	0.15	0.30	0.22
B	0.75	0.85	0.80
C	1.45	1.75	1.60
D	—	—	0.50
G	0.90	1.10	1.00
H	1.50	1.70	1.60
J	0.00	0.10	0.05
K	0.60	0.80	0.75
L	0.10	0.30	0.22
M	0.10	0.20	0.12
N	0.45	0.65	0.50
All Dimensions in mm			

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	250	V
Working Peak Reverse Voltage DC Blocking Voltage	V_{RWM} V_R	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	141	V
Forward Continuous Current	I_{FM}	400	mA
Average Rectified Output Current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0\mu\text{s}$ @ $t = 1.0\text{s}$	I_{FSM}	2.5 0.5	A
Repetitive Peak Forward Surge Current	I_{FRM}	625	mA
Power Dissipation (Note 1)	P_d	150	mW
Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	833	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150	$^\circ\text{C}$

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Maximum Forward Voltage	V_{FM}	—	1.0 1.25	V	$I_F = 100\text{mA}$ $I_F = 200\text{mA}$
Maximum Peak Reverse Current @ Rated DC Blocking Voltage	I_{RM}	—	100 15	nA μA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Junction Capacitance	C_j	—	5.0	pF	$V_R = 0, f = 1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	—	50	ns	$I_F = I_R = 30\text{mA}$, $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

Ordering Information (Note 2)

Device	Packaging	Shipping
BAS21T-7	SOT-523	3000/Tape & Reel

- Notes:
1. Device mounted on FR-4 PC board with recommended pad layout, minimum.
 2. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

