

Surface Mount Switching Diodes

 Lead(Pb)-Free

Features:

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

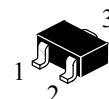
Mechanical Data:

- * Terminals: Solderable per MIL-STD-202, Method 208
- * Polarity: See Diagrams Page.2
- * Marking: See Diagrams Page.2
- * Weight: 0.002 grams (approx)

SWITCHING DIODES

75 mAMPERES

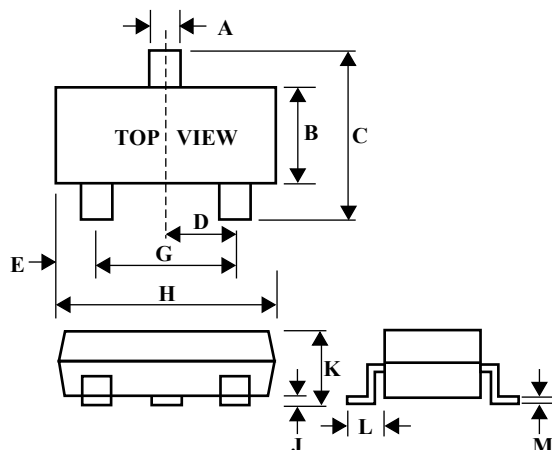
85 VOLTS



SOT-523(SC-75)

SOT-523 Outline Dimensions (SC-75)

Unit:mm



SC-75		
Dim	Min	Max
A	0.30	0.50
B	0.70	0.90
C	1.45	1.75
D	-	0.50
E	0.15	0.40
G	0.80	1.00
H	1.40	1.80
J	0.00	0.10
K	0.70	1.00
L	0.37	0.48
M	0.10	0.25

Maximum Ratings (T_A=25°C Unless otherwise noted)

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RRM} V _R	85	V
Forward Continuous Current Single Diode Double Diode	I _{FM}	155 75	mA
Non-Repetitive Peak Forward Surge Current @t=1.0μs @t=1.0ms @t=1.0s	I _{FSM}	4.0 1.0 0.5	A
Power Dissipation	P _d	150	mW
Thermal Resistance	R _{θJA}	833	°C/W
Storage Temperature Range	T _j , T _{STG}	-55 to + 150	°C

Electrical Characteristics (T_A=25°C Unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage I _R =100μA	V _{(BR)R}	85	-	V
Forward Voltage I _F =1.0mA I _F =10mA I _F =50mA I _F =150mA	V _F	-	715 855 1000 1250	mV
Total Capacitance V _R =0V, f=1.0MHz	C _T	-	1.5	pF
Reverse Current V _R =75V V _R =25V	I _R	-	2.0 0.03	μA
Reverse Recover Time I _F =I _R =10mA, I _{rr} =0.1 × I _R , R _L =100Ω	T _{rr}	-	4.0	nS

Device Marking

Item	Marking	Equivalent Circuit diagram
BAS16T	A2	
BAV99T	JE	
BAV70T	JJ	
BAW56T	JD	

Electrical Characteristic curves($T_A=25^{\circ}\text{C}$)

