

Features

- Fast Switching Device (TRR <4nS)
- Power Dissipation of 150mW
- High Stability and High Reliability
- Low reverse leakage

Applications

Small signal switching
Ultra high speed switching application

Mechanical Data

- Case: SOT-23
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Cathode line denotes the cathode end

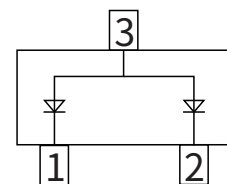
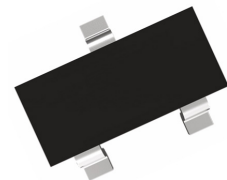
Reverse Voltage

80 V

Forward Current

0.1 Ampere

SOT-23



Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Maximum repetitive peak reverse voltage	V_{RRM}	V	80
Maximum RMS Voltage	V_{RMS}	V	80
Reverse Breakdown voltage @ $I_R=100\mu A$	$V_{(BR)R}$	V	80
Maximum Average Forward Rectified Current	$I_{F(AV)}$	mA	100
Non-Repetitive Peak forward surge current @ $t_p=1.0ms$	I_{FSM}	A	2.0
Power Dissipation	P_d	mW	150
Storage temperature	T_{stg}	°C	-55 ~ +150
Junction temperature	T_j	°C	+150
Typical thermal resistance	$R_{\theta J-A}$	°C /W	833

Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SOT-23	R1	0.008	3000	45000	180000	7"

Package Outline Dimensions (SOT-23)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.90	1.15	0.035	0.045
A1	-	0.10	-	0.004
A2	0.90	1.05	0.035	0.041
b	0.30	0.50	0.012	0.020
c	0.10	0.20	0.004	0.008
D	2.80	3.00	0.110	0.118
E	1.20	1.40	0.047	0.055
E1	2.25	2.55	0.089	0.100
e	0.950TYP		0.037TYP	
e1	1.80	2.00	0.071	0.079
L	0.550REF		0.022REF	
L1	0.30	0.50	0.012	0.020
θ	-	8°	-	8°

Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
J	0.75	0.85	0.030	0.033
K	0.85	0.95	0.033	0.037
M	1.95	2.05	0.077	0.081
N	1.85	1.95	0.073	0.077

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