

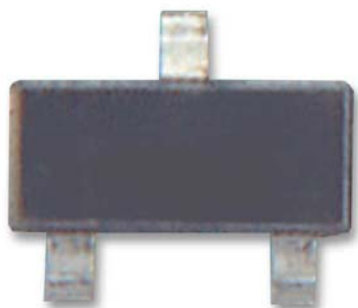
TBAV70

Low Power Signal Diodes



Features:

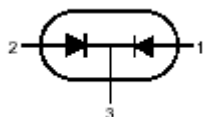
- Silicon planar epitaxial high-speed diodes.
- Supplied on 8mm tape.



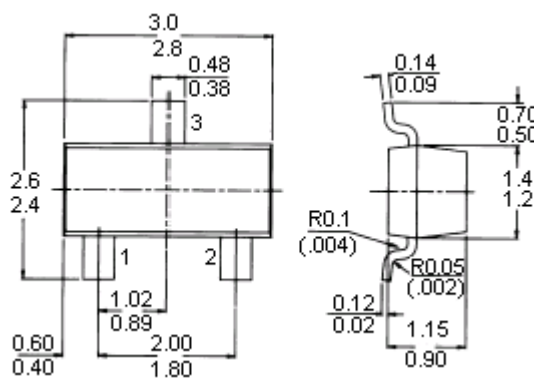
SOT-23 Formed SMD Package

Pin Configuration

- 1 = Anode
2 = Anode
3 = Cathode



Package Outline Details



Dimensions : Millimetres

Height	Width	Depth
1.12	3.05	2.5

Dimensions : Millimetres

Absolute Maximum Ratings

Description	Symbol		Values	Unit
Continuous reverse voltage	V_R	maximum	70	V
Repetitive peak reverse voltage	V_{RRM}		75	
Repetitive peak forward current	I_{FRM}		450	mA
Junction temperature	T_j		150	°C
Forward voltage $I_F = 50mA$	V_F	<	1.0	V
Reverse recovery time when switched from $I_F = 10mA$ to $I_R = 10mA$; $R_L = 100W$; measured at $I_R = 1mA$	t_{rr}	<	4	ns
Recovery charge when switched from $I_F = 10mA$ to $V_R = 5V$; $R_L = 100W$	Q_S	<	45	pc



Ratings (per diode)

Limiting values

Description	Symbol		Values	Unit
Continuous reverse voltage	V _R	maximum	70	V
Repetitive peak reverse voltage	V _{RRM}		75	V
Forward current (DC)	I _F		215	mA
Repetitive peak forward current	I _{FRM}		450	
Non-repetitive peak forward current (per crystal) t = 1nS t = 1mS t = s	I _{FSM} I _{FSM} I _{FSM}		4 1 0.5	A
Storage temperature range	T _{stg}	-55 to +150		°C
Junction temperature	T _j	maximum	150	
Thermal Resistance				
Description	Symbol		Values	Unit
From junction to ambient T _j = 25 °C unless otherwise specified	R _{th (j-a)}	=	500	K/W
Forward voltage I _F = 1 mA I _F = 10 mA I _F = 50 mA I _F = 150 mA	V _F V _F V _F V _F	< < < <	715 855 1000 1250	mV
Reverse current V _R = 25V; T _j = 150°C V _R = 70V V _R = 70V; T _j = 150°C	I _R I _R I _R	< < <	60 2.5 100	mA
Diode capacitance V _R = 0; f = 1MHz	C _d	<	1.5	pF
Forward recovery voltage when switched to I _F = 10mA, t _r = 20ns	V _{fr}	<	1.75	V

TBAV70

Low Power Signal Diodes



Specifications

Connection	V_{RRM} maximum (V)	I_F maximum (mA)	V_F maximum (V) at $I_F = 10\text{mA}$	Device Marking	Package	Part Number
Dual Diode	70	200	1	A4	SOT - 23	TBAV70

Notes:

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