



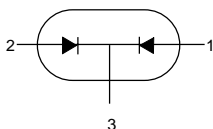
Features:

- Silicon planar epitaxial high-speed diodes.
- High speed switching diode pair, common cathode.

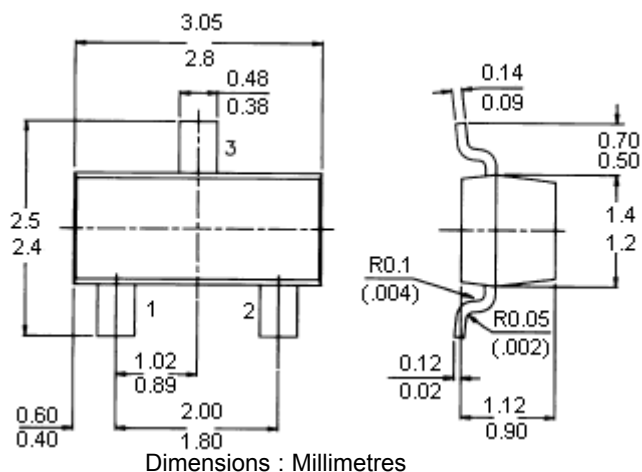
SOT-23 Formed SMD Package

Pin Configuration

1. Anode (a1)
2. Anode (a2)
3. Cathode (k)



Package Outline Details



Absolute Maximum Ratings

Parameters	Symbol		Ratings	Units
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 at $I_F = 50\text{mA}$	V_F	<	1.0	V
Reverse recovery time when switched from $I_F = 10\text{mA}$ to $I_R = 10\text{mA}$; $R_L = 100\Omega$ measured at $I_R = 1\text{mA}$	t_{rr}	<	4	ns
Recovery charge when switched from $I_F = 10\text{mA}$ to $V_R = 5\text{V}$; $R_L = 100\Omega$	Q_s	<	45	pc

Ratings (per diode)

Limiting Values	Symbol		Ratings	Units
Continuous reverse voltage	V_R	Maximum	70	V
Repetitive peak reverse voltage	V_{RRM}		75	
Forward current (DC)	I_F		215	mA
Repetitive peak forward current	I_{FRM}		450	
Non-repetitive peak forward current (per crystal) $t = 1\mu s$ $t = 1ms$ $t = 1s$	I_{FSM}		4 1 0.5	A
Storage temperature range	T_{stg}	-	-55 to +150	°C
Junction temperature	T_j	Maximum	150	
Thermal Resistance				
From junction to ambient $T_j = 25^\circ C$ unless otherwise specified	$R_{th(j-a)}$	=	500	K/W

Forward voltage $I_F = 1mA$ $I_F = 10mA$ $I_F = 50mA$ $I_F = 150mA$	V_F	<	715 855 1000 1250	mV
Reverse current $V_R = 25V; T_j = 150^\circ C$ $V_R = 70V$ $V_R = 70V; T_j = 150^\circ C$	I_R	<	60 2.5 100	μA
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

Specifications

V_{RRM} (V)	$I_{F(av)}$ (mA)	V_f (V) at $I_f = 50mA$	Device Marking	Package	Type	Package	Part Number
75	200	1	A4	SOT-23	Dual Diode, Common Anode	8mm Tape	BAV70

Notes:

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