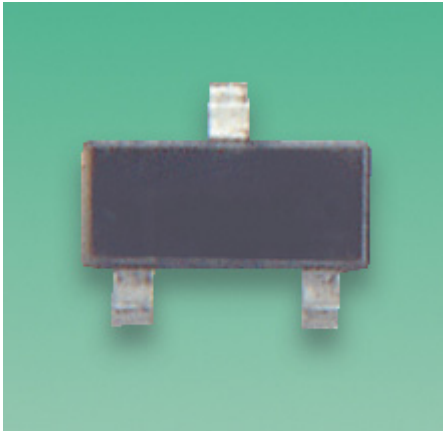


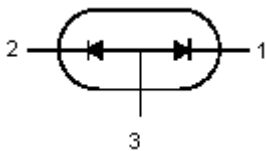


Features:

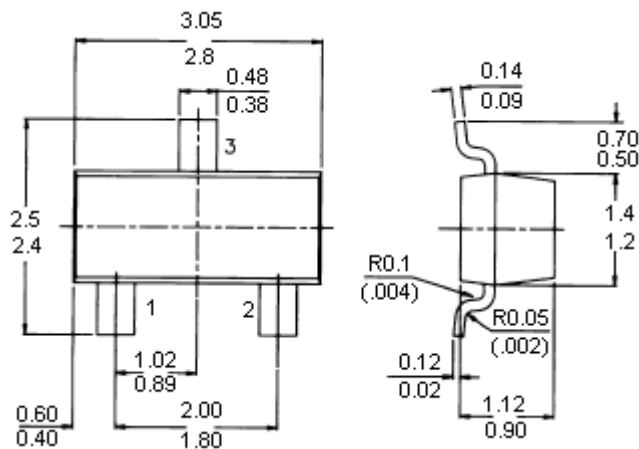
- Silicon planar epitaxial high-speed diodes.
- Silicon planar high-speed switching series diode pair.

Pin Configuration

1. Cathode (k1)
2. Cathode (k2)
3. Anode (a)



Package Outline Details



Absolute Maximum Ratings

Parameters	Symbol		Value	Units
Continuous reverse voltage	V_R	Maximum	75	V
Repetitive peak reverse voltage	V_{RRM}		85	
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) (at $T_A = 25^\circ\text{C}$ unless otherwise specified)

Limiting values	Symbol		Value	Units
Continuous reverse voltage	V _R	Maximum	75	V
Repetitive peak reverse voltage	V _{RRM}		85	
Forward current (DC)	I _F		215	mA
Repetitive peak forward current	I _{FRM}		450	
Non-repetitive peak forward current (per crystal) t = 1μs 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	R _{th(j-a)}	=	500	K/W

Characteristics (per diode) (at $T_A = 25^\circ\text{C}$ unless otherwise specified)

Limiting values	Symbol		Value	Units
$T_j = 25^\circ\text{C}$ unless otherwise specified	-	-	-	-
Forward voltage $I_F = 1\text{ mA}$ $I_F = 10\text{ mA}$ $I_F = 50\text{ mA}$ $I_F = 150\text{ mA}$	V_F	<	715 855 1000 1250	mV
Reverse current $V_R = 25\text{V}; T_j = 150^\circ\text{C}$ $V_R = 75\text{V}$ $V_R = 75\text{V}; T_j = 150^\circ\text{C}$	I_R	<	30 1.0 50	mA
Diode capacitance $V_R = 0; f = 1\text{MHz}$	C_d	<	2.0	pF
Forward recovery voltage when switched to $I_F = 10\text{mA}; t_r = 20\text{ns}$	V_{fr}	<	1.75	V

Specifications

V_{RRM} (V)	$I_{F(av)}$ (mA)	V_f (V) at $I_f = 150\text{mA}$	Device Marking	Package	Type	Package	Part Number
70	200	1.25	A1	SOT-23	Dual Diode, Common Anode	8mm Tape	BAW56

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