

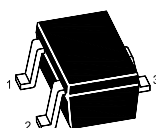
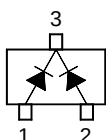
BAV70W

Silicon Epitaxial Planar Switching Diode

Features

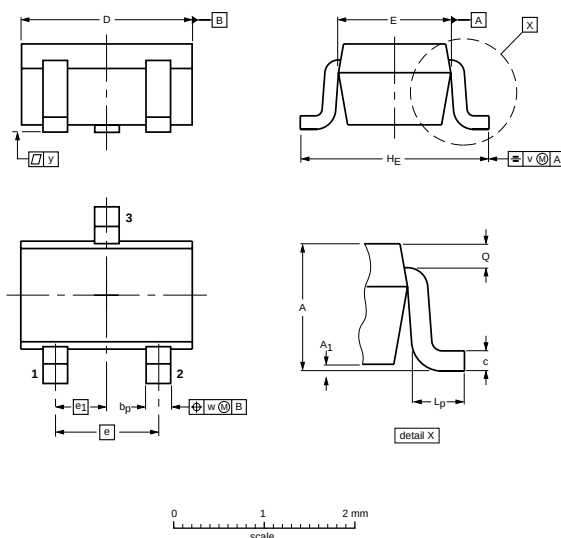
- Fast switching diode
- Ultra small surface mount package

Marking Code: A4



SOT-323

SOT-323



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w
mm	1.1 0.8	0.1	0.4 0.3	0.25 0.10	2.2 1.8	1.35 1.15	1.3	0.65	2.2 2.0	0.45 0.15	0.23 0.13	0.2	0.2

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Reverse Voltage	V _R	75	V
Continuous Forward Current Single diode loaded Double diode loaded	I _F	175 100	mA
Repetitive Peak Forward Current	I _{FRM}	500	mA
Non-repetitive Peak Forward Surge Current at t = 1 s at t = 1 ms at t = 1 μs	I _{FSM}	0.5 1 4	A
Power Dissipation	P _{tot}	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 65 to + 150	°C

BAV70W

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{BR(R)}$	75	-	V
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 50\text{ mA}$ at $I_F = 150\text{ mA}$	V_F	- - - -	0.715 0.855 1 1.25	V
Reverse Leakage Current at $V_R = 25\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 25\text{ V}$, $T_J = 150\text{ }^{\circ}\text{C}$ at $V_R = 75\text{ V}$, $T_J = 150\text{ }^{\circ}\text{C}$	I_R	- - - -	30 2.5 60 100	nA μA μA μA
Diode Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_{tot}	-	2	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$ to $I_R = 10\text{ mA}$, $I_{rr} = 0.1 I_R$, $R_L = 100\text{ }\Omega$	t_{rr}	-	4	ns

RATING AND CHARACTERISTIC CURVES (BAV70W)

