

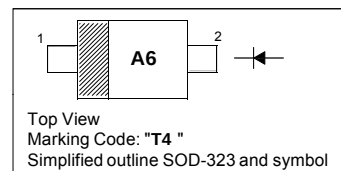
BAV16WS Silicon Epitaxial Planar Switching Diode

Features

- SOD-323 package
- Fast switching
- These diodes are also available in other case style including the DO-35 case with the type designation BAS316, the MiniMELF case with the type designation BAS316 and the MicroMELF case with the type designation BAS316

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

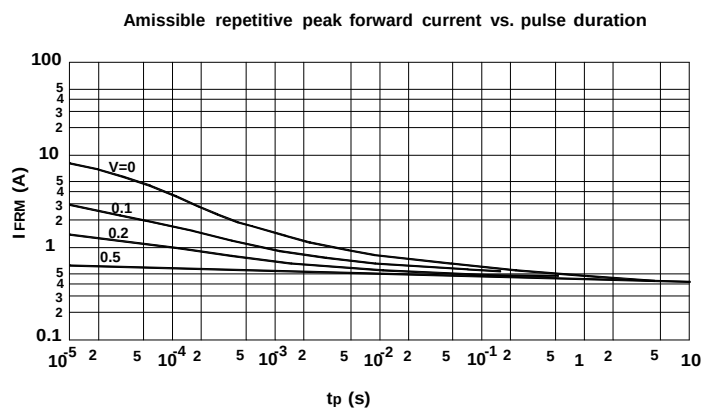
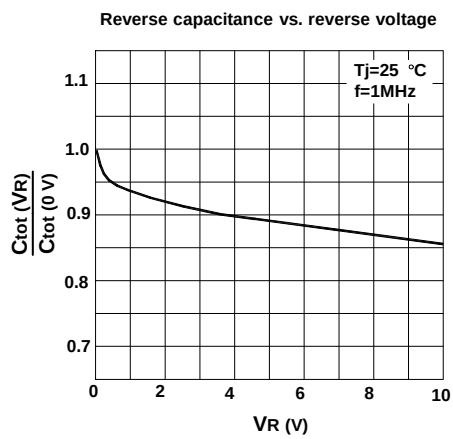
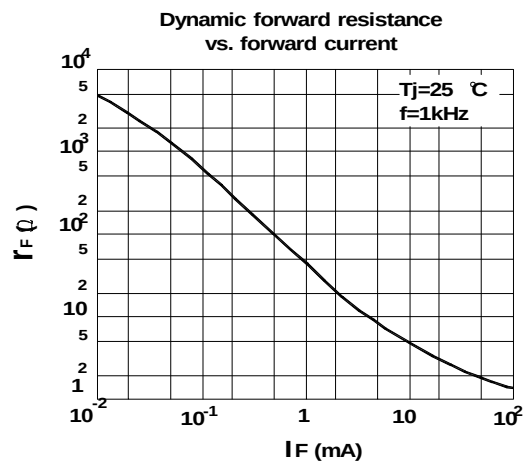
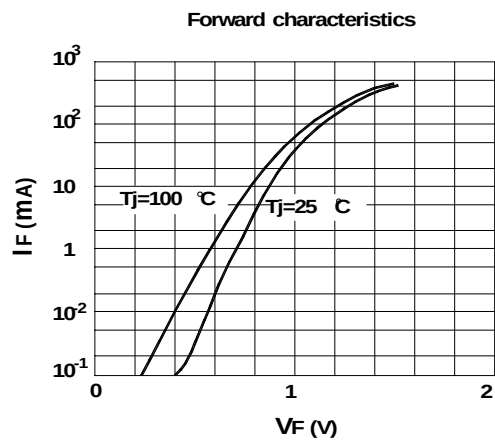


Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Surge Forward Current ($t < 1\text{ s}$, $T_J = 25\text{ }^{\circ}\text{C}$)	I_{FSM}	350	mA
Power Dissipation	P_{tot}	200	mW
Thermal Resistance from Junction to Ambient Air	$R_{\theta JA}$	625	$^{\circ}\text{C/W}$
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^{\circ}\text{C}$

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

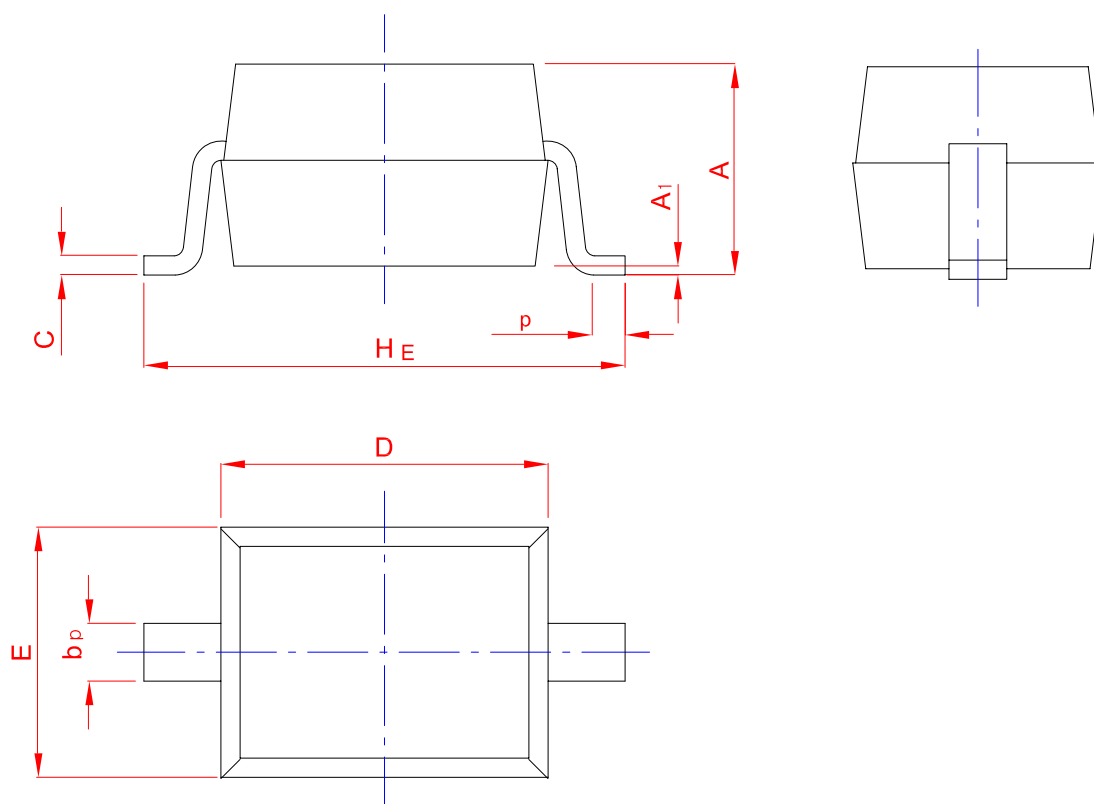
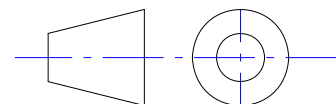
Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 50\text{ mA}$ at $I_F = 150\text{ mA}$	V_F	- - - -	0.715 0.855 1 1.25	V
Peak Reverse Current at $V_R = 75\text{ V}$ at $V_R = 20\text{ V}$ at $V_R = 75\text{ V}$, $T_J = 150\text{ }^{\circ}\text{C}$ at $V_R = 25\text{ V}$, $T_J = 150\text{ }^{\circ}\text{C}$	I_R	- - - -	1 25 50 30	μA nA μA μA
Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	-	2	pF
Reverse Recovery Time at $I_{rr} = 0.1 \times I_R$, $I_F = I_R = 10\text{ mA}$, $R_L = 100\text{ }\Omega$	t_{rr}	-	4	ns



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b _p	C	D	E	H _E	A ₁	L _p
mm	1.20 0.90	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30	0.10 0.01	0.50 0.20