



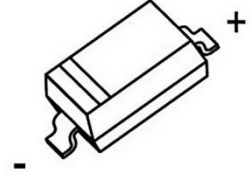
1N4148W/BAV16W

FAST SWITCHING DIODE

SOD-123

FEATURES

- *Fast Switching Speed
- *Surface Mount Package Ideally Suited for Automatic Insertion
- *For General Purpose Switching Applications
- *High Conductance



MARKING

1N4148W	BAV16W

The marking bar indicates the cathode

Solid dot = Green molding compound device, if none, the normal device.

ABSOLUTE MAXIMUM RATINGS (TC=25°C, unless otherwise specified)

SYMBOL	PARAMETER	TEST CONDITION	Limit	UNIT
VRM	Non-Repetitive Peak Reverse Voltage		100	V
VRRM	Peak Repetitive Peak Reverse Voltage			
VRWM	Working Peak Reverse Voltage		100	V
VR	DC Blocking Voltage			
VR(RMS)	RMS Reverse Voltage		71	V
IFM	Forward Continuous Current		300	mA
IO	Average Rectified Output Current		150	mA
IFSM	Non-Repetitive Peak Forward Surge Current	tp=8.3ms	2.0	A
Pd	Power Dissipation	1N4148W	350	mW
		BAV16W	400	
RθJA	Thermal Resistance from Junction to Ambient(Note 1)	1N4148W	357.1	°C/W
		BAV16W	312.5	
Tj, Tstg	Operation Junction and Storage Temperature Range		150	°C

Note: Device mounted on 1"x1" FR4 PCB, 1oz single-side copper.



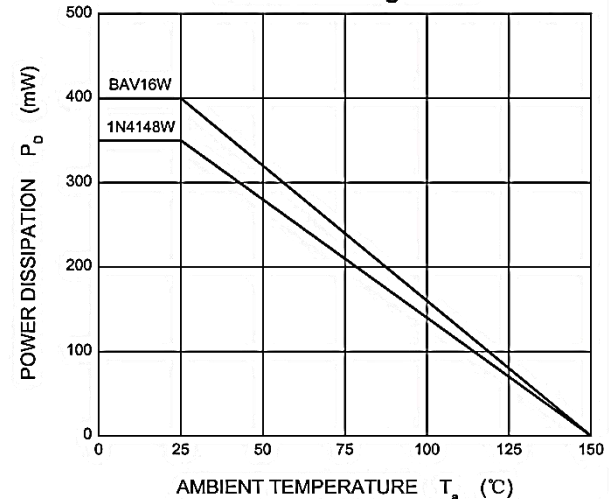
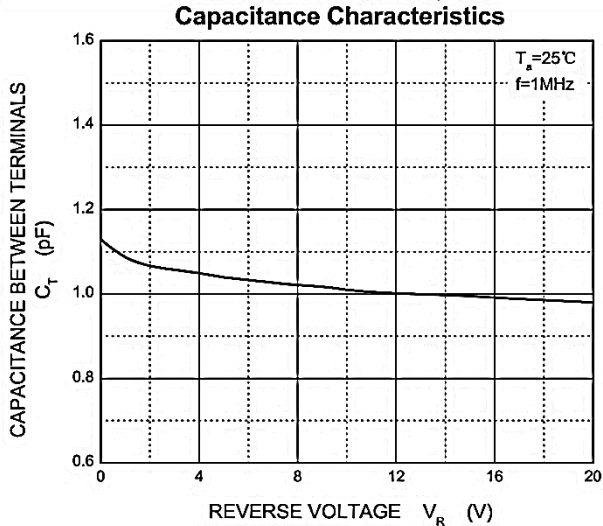
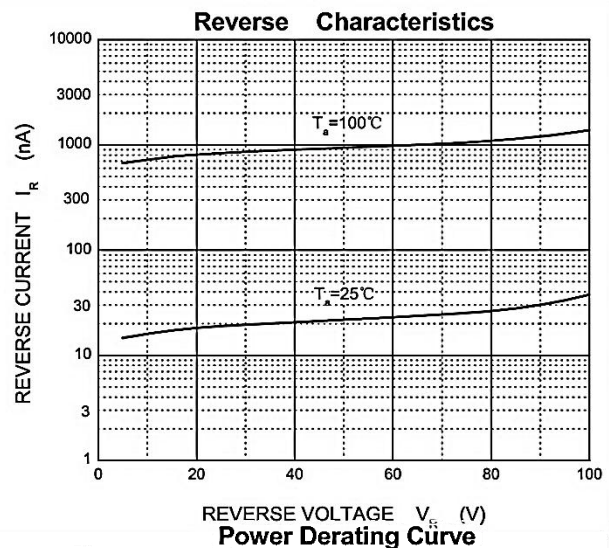
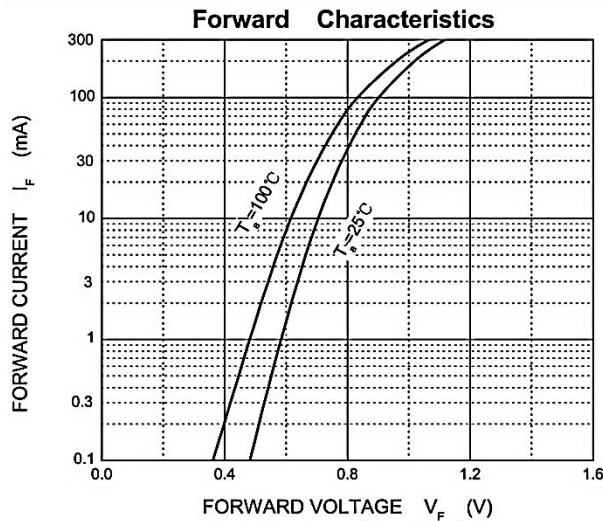
1N4148W/BAV16W

FAST SWITCHING DIODE

ELECTRICAL CHARACTERISTICS (Tc=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward voltage	VF1	IF=1mA			0.715	V
	VF2	IF=10mA			0.855	V
	VF3	IF=50mA			1.0	V
	VF4	IF=150mA			1.25	V
Reverse current	IR1	VR=75V			1	μA
	IR2	VR=20V			25	nA
Capacitance between terminals	CT	VR=0V,f=1MHz			2	pF
Reverse recovery time	trr	IF=IR=10mA Irr=0.1×IR,RL=100Ω			4	ns

TYPICAL CHARACTERISTICS

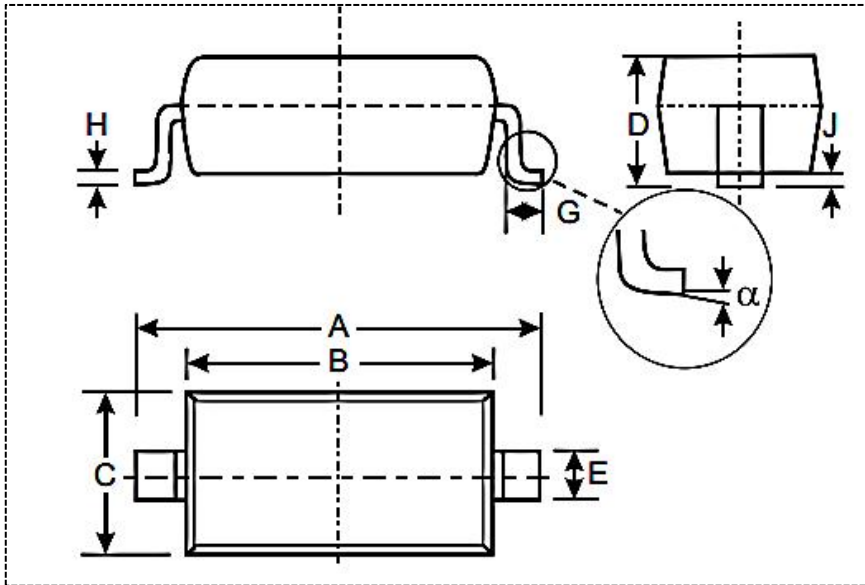




1N4148W/BAV16W

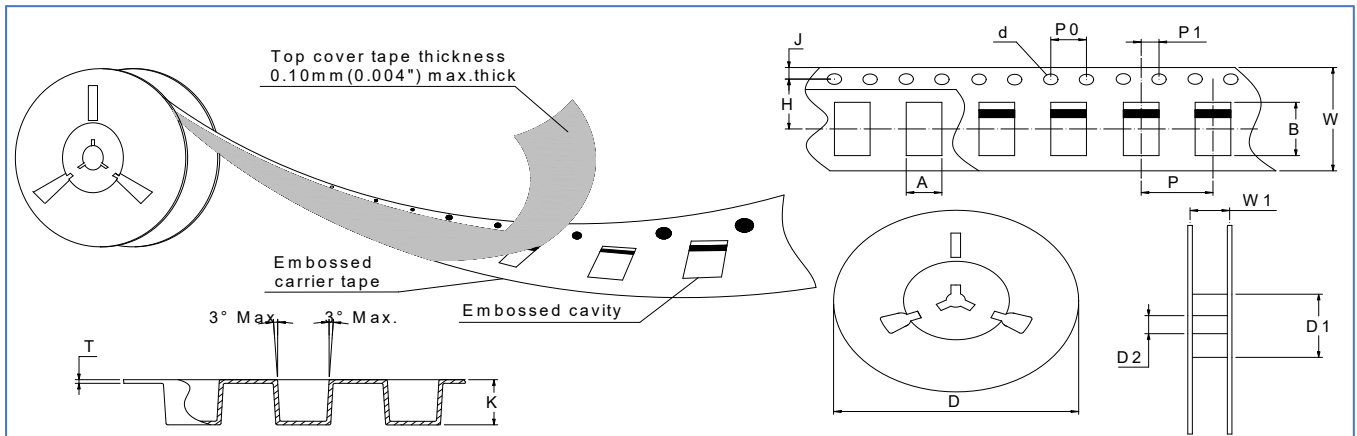
FAST SWITCHING DIODE

■ SOD-123 PACKAGE OUTLINE DIMENSIONS



SOD-123		
Dim	Min	Max
A	3.55	3.85
B	2.60	2.80
C	1.50	1.70
D	—	1.20
E	0.55 Typical	
G	0.25	—
H	0.10 Typical	
J	—	0.10
α	0°	8°
All Dimensions in mm		

■ REEL PACKING



SYMBOL	A	B	d	D*	D1	D2	J	H	K	P	P0	P1	T	W	W1
	Max.	Max.	Typ.	/	Min.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Typ.	Min.
mm(inch)															
SOD123	2.1(0.083)	4.0(0.157)	1.55(0.061)	330.0/178.0(13/7)	50.0(1.969)	13.0(0.512)	1.75(0.069)	3.50(0.138)	1.60(0.063)	4.00(0.157)	4.00(0.157)	2.00(0.079)	0.25(0.010)	8.15(0.321)	10.5(0.413)
*NOTE: D=13inch Q.TY PER REEL=10K ; D=7inch Q.TY PER REEL=3K															