

Description

The BAV99DW is silicon diode, SOT-363 plastic package.

Features

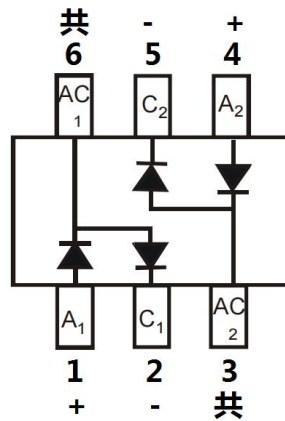
- Small signal diode
- Fast Switching Speed
- Halogen-free product

Applications

- High Conductance Ultra Fast Diode

V_{RRM}	I_{FM}	I_{FSM}
100 V	215 mA	2.0 A

Equivalent Circuit



Marking

See Marking Instructions

Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM}	75	V
	V_{RWM}		
	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	215	mA
Non-Repetitive Peak Forward Surge Current@8.3mS	I_{FSM}	2.0	A
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150	°C

Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Min	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 2.5\mu A$	75		V
Forward Voltage	V_F	$I_F = 1.0mA$		0.715	V
		$I_F = 10mA$		0.855	
		$I_F = 50mA$		1.0	
		$I_F = 150mA$		1.25	
Reverse Current	I_R	$V_R = 75V$		2.5	μA
		$V_R = 20V$		25	nA
Total Capacitance	C_T	$V_R = 0, f = 1.0MHz$		2.0	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10mA,$ $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$		4.0	ns

Electrical Characteristic Curve(NPN)

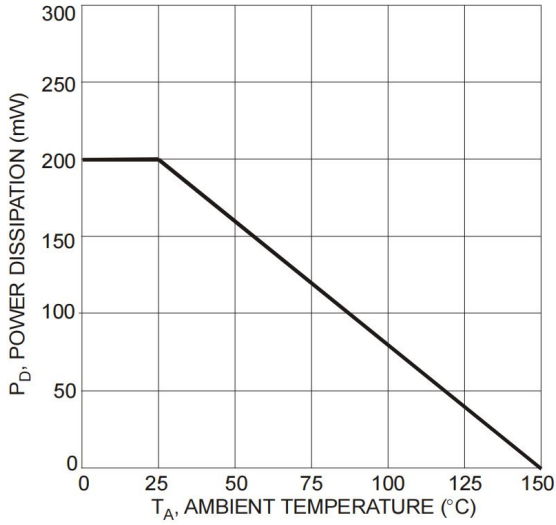


Fig. 1 Power Derating Curve, Total Package

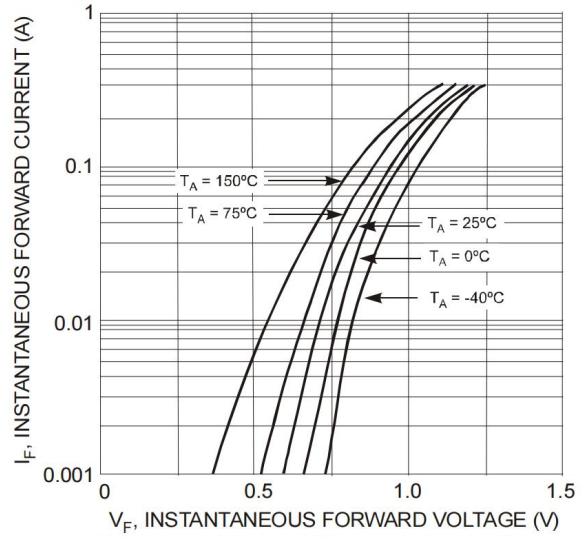


Fig. 2 Typical Forward Characteristics, Per Element

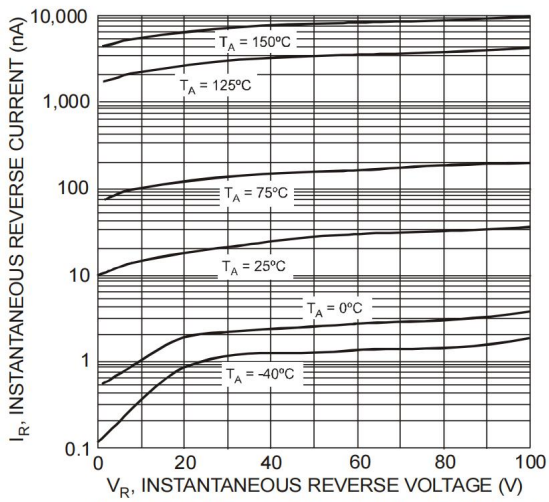


Fig. 3 Typical Reverse Characteristics, Per Element

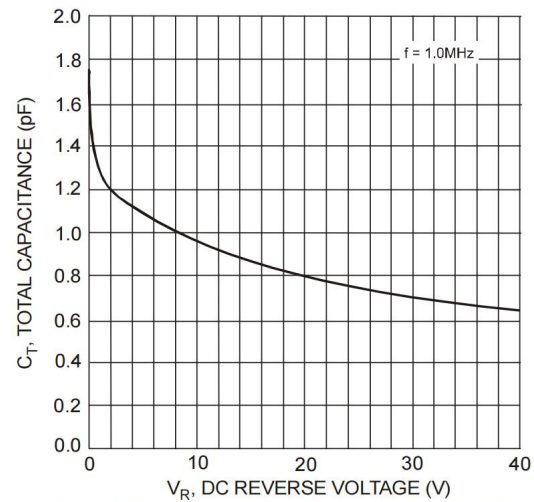
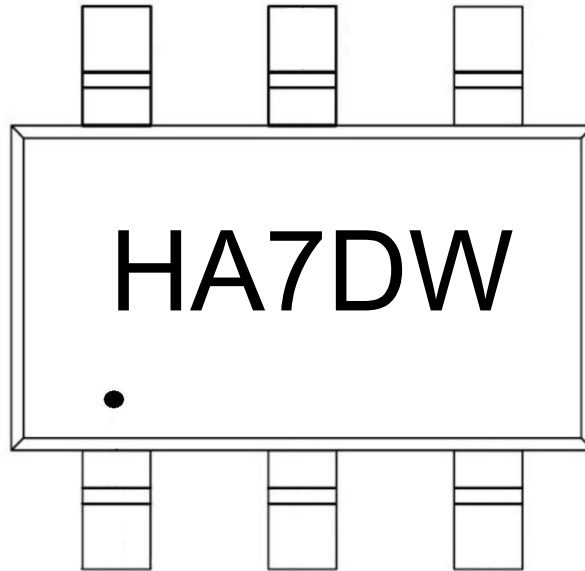


Fig. 4 Total Capacitance vs. Reverse Voltage, Per Element

Marking Instructions



Note:

● : "1" Pin

HA7DW : Product Type Code

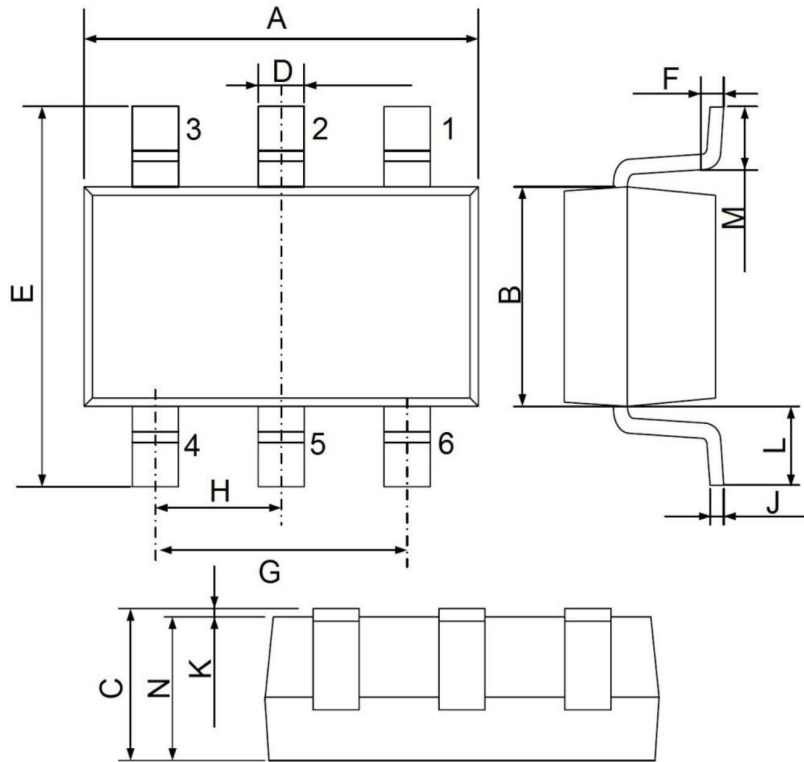
Packaging SPEC.

REEL

Package Type	Units					Dimension (unit: mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOT-363	3,000	10	30,000	6	180000	7" x8	180×120×180	390×385×205

Package Dimensions

SOT-363-6L



UNIT: mm

DIM	MIN	MAX
A	2.00	2.20
B	1.15	1.35
C	0.90	1.10
D	0.15	0.35
E	1.95	2.25
F	0.20 Typ.	
G	1.20	1.40
H	0.65 Typ.	
J	0.08	0.15
K	0.00	0.10
L	0.525 Ref.	
M	0.26	0.46
N	0.90	1.10