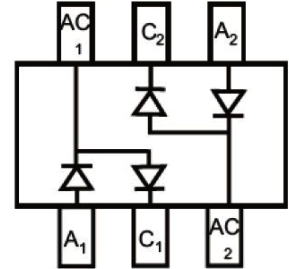


Surface Mount Fast Switching Diode



Features:

- Fast Switching Speed
- For General Purpose Switching Application
- Ultra-Small Surface Mount Package
- High Conductance
- Two "BAV99" Circuits in One Package



SOT-363

Applications:

For general purpose switching application

Max. Rating @ T_A = 25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Non-repetitive peak reverse voltage	V _{RM}	100	V
Peak repetitive reverse voltage	V _{RRM}	75	V
Working peak reverse voltage	V _{RMS}		
DC reverse voltage	V _R		
RMS reverse voltage	V _{R(RMS)}	53	V
Forward continuous current	I _{FM}	215	mA
Non-repetitive peak forward surge current			A
	@t = 1μs	2	
	@t = 1ms	1	
	@t = 1s	0.5	
Power dissipation	P _D	200	mW
Thermal resistance, junction to ambient	R _{θJA}	625	°C/W
Junction and storage temperature	T _J , T _{STG}	-65 to +150	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse breakdown voltage	V _{(BR)R}	I _R = 2.5μA	75	-	V
Forward voltage	V _F	I _F = 1mA I _F = 10mA I _F = 50mA I _F = 150mA	-	0.715 0.855 1 1.25	V
Junction capacitance	C _J	V _R = 0V, f = 1MHz	-	2	pF
Reverse recovery time	t _{rr}	I _F = I _R = 10mA, I _{rr} = 0.1 × I _R , R _L = 100Ω	-	4	ns

Surface Mount Fast Switching Diode



Typical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

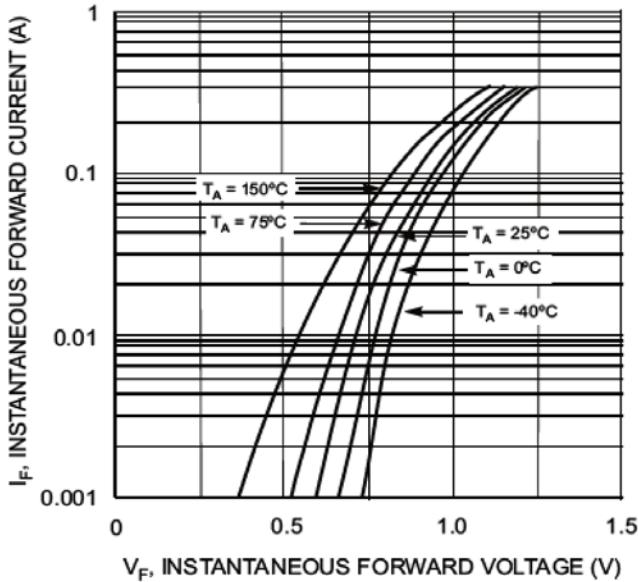


Fig. 1 Forward Characteristics

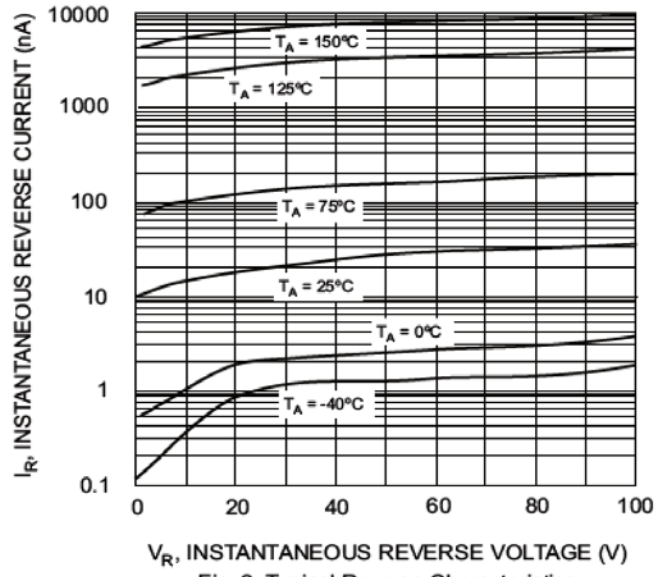


Fig. 2 Typical Reverse Characteristics

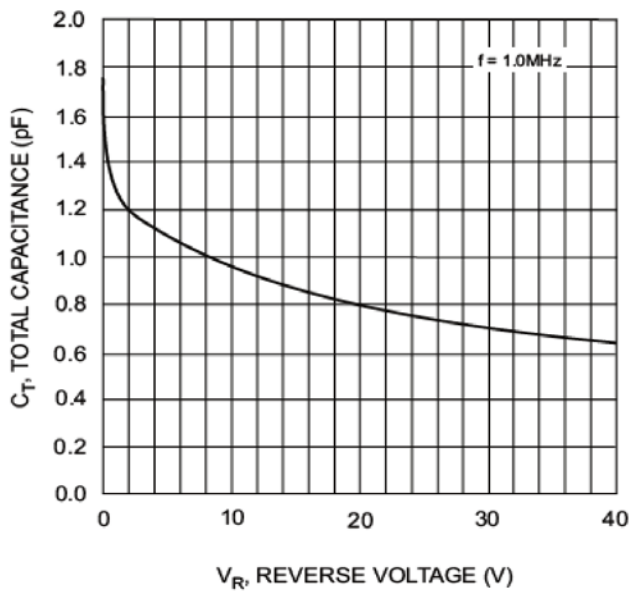


Fig. 3 Typical Capacitance vs. Reverse Voltage

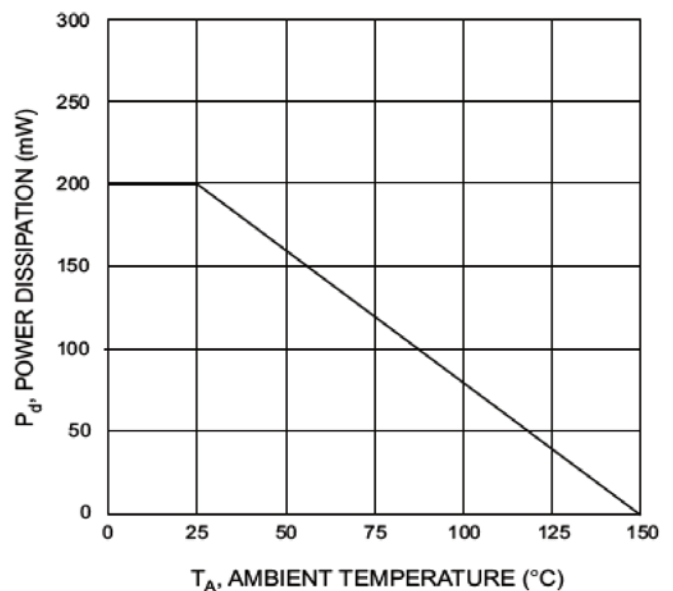


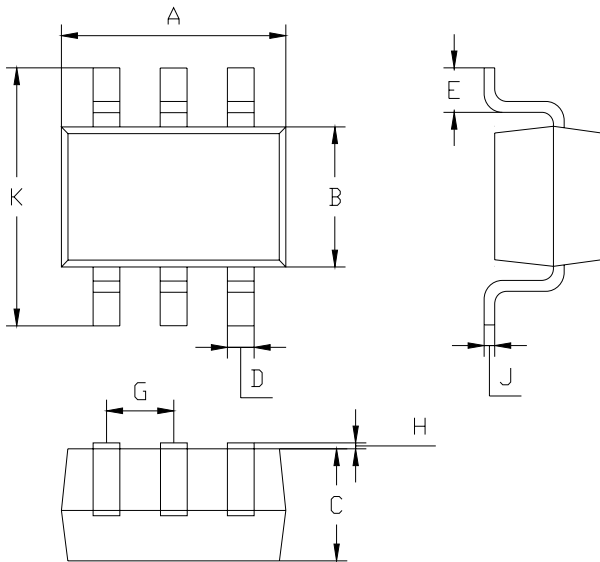
Fig. 4 Power Derating Curve



Surface Mount Fast Switching Diode

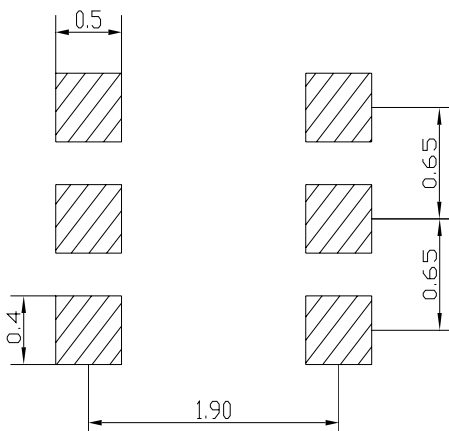


Plastic surface mounted package



SOT-363		
Dim	Min	Max
A	1.8	2.2
B	1.15	1.35
C	1 Typical	
D	0.1	0.3
E	0.25	0.4
G	0.65 Typical	
H	0.02	0.1
J	0.1 Typical	
K	2.1	2.3
All Dimensions in mm		

Soldering Footprint



Unit : mm

Package Information

Device	Package	Shipping
BAV99DW-7-F	SOT-363	3,000 / Tape & Reel

Part Number Table

Description	Part Number
Surface Mount Fast Switching Diode	BAV99DW-7-F

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