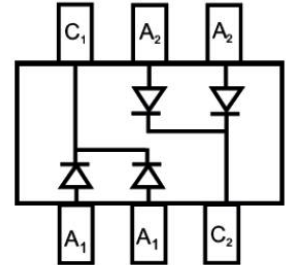


# Surface Mount Fast Switching Diode



## Features:

- Fast Switching Speed
- For General Purpose Switching Application
- Ultra-Small Surface Mount Package
- High Conductance
- Two “BAV70” Circuits in One Package



## Applications:

For general purpose switching application

**SOT-363**

## Max. Rating @ TA = 25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
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	$I_{FM}$	300	mA
Non-repetitive peak forward surge current			
@t = 1µs		2	A
@t = 1s		1	
Average rectified output current	$I_o$	150	mA
Power dissipation	$P_D$	200	mW
Thermal resistance, junction to ambient	$R_{\theta JA}$	625	°C/W
Operating and storage temperature range	$T_j, T_{STG}$	-65 to +150	°C

## Electrical Characteristics @ TA = 25°C unless otherwise specified

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 100\mu A$	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	$t_{rr}$	$I_F = I_R = 10mA,$ $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$	-	3	ns

# Surface Mount Fast Switching Diode



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

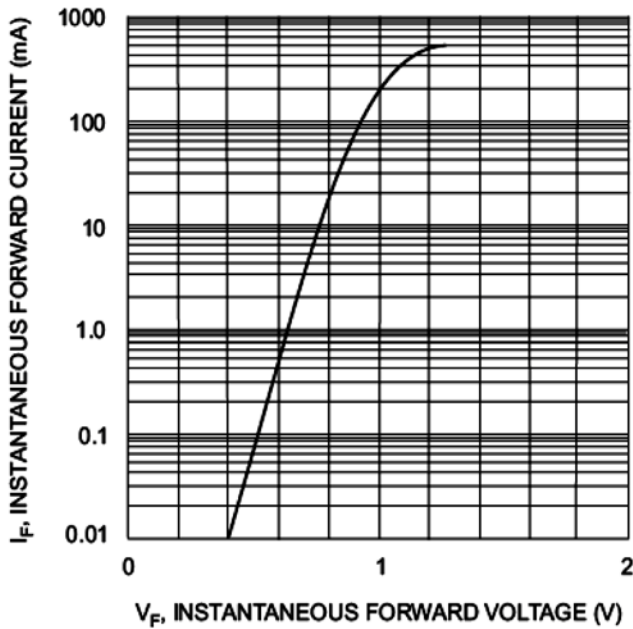


Fig. 1 Forward Characteristics

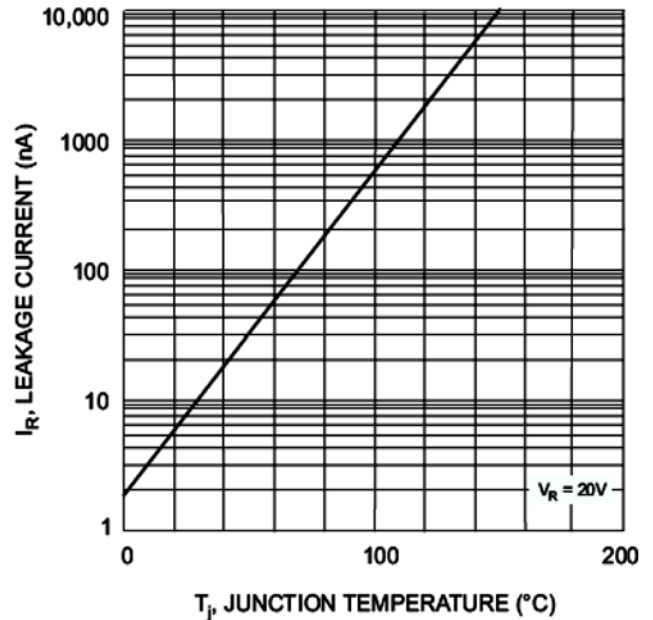
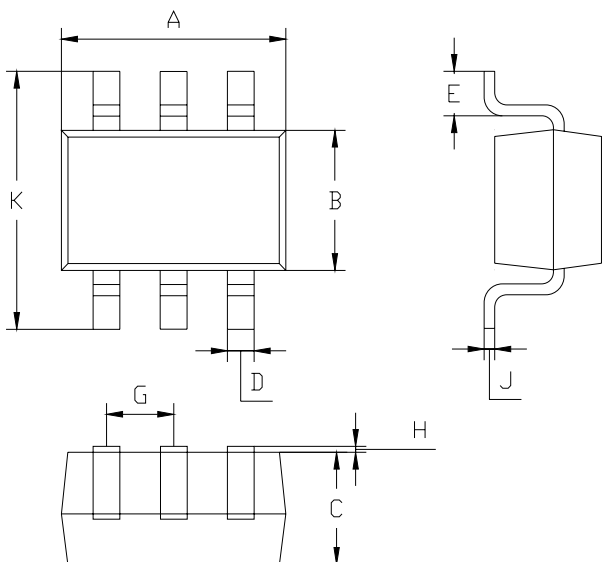


Fig. 2 Leakage Current vs Junction Temperature

## Plastic surface mounted package



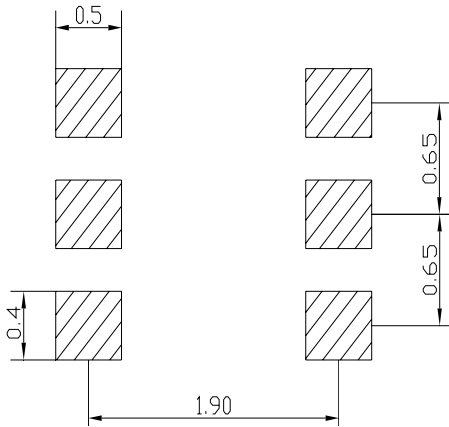
SOT-363		
Dim	Min	Max
A	1.8	2.2
B	1.15	1.35
C	1 Typical	
D	0.10	0.3
E	0.25	0.4
G	0.65 Typical	
H	0.02	0.1
J	0.1 Typical	
K	2.1	2.3
All Dimensions in mm		



# Surface Mount Fast Switching Diode



## Soldering Footprint



Unit : mm

## Package Information

Device	Package	Shipping
BAV70DW-7-F	SOT-363	3,000 / Tape & Reel

## Part Number Table

Description	Part Number
Surface Mount Fast Switching Diode	BAV70DW-7-F

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