

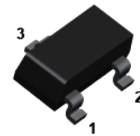
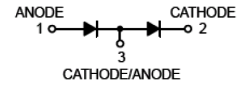
# Dual Surface Mount Low Leakage Diode

**multicomp** PRO



## Features:

- Medium Speed Current Applications
- Very Low Leakage Current
- Surface Mount Package Ideally Suited for Automatic Insertion



SOT-23

## Applications:

Small signal switching

## Max. Rating @ T<sub>A</sub> = 25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Repetitive peak reverse voltage Working peak reverse voltage DC reverse voltage	V <sub>RRM</sub> V <sub>RMS</sub> V <sub>R</sub>	85	V
RMS reverse voltage	V <sub>R(RMS)</sub>	60	V
Peak forward surge current @t=1.0µs @t=1.0ms @t=1.0s	I <sub>FSM</sub>	4 1 0.5	A
Forward continuous current Single diode Double diode	I <sub>FM</sub>	160 140	mA
Repetitive peak forward current	I <sub>FRM</sub>	500	mA
Power dissipation	P <sub>D</sub>	250	mW
Thermal resistance junction to ambient air	R <sub>θJA</sub>	500	°C/W
Operating and storage temperature range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150	°C

## Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

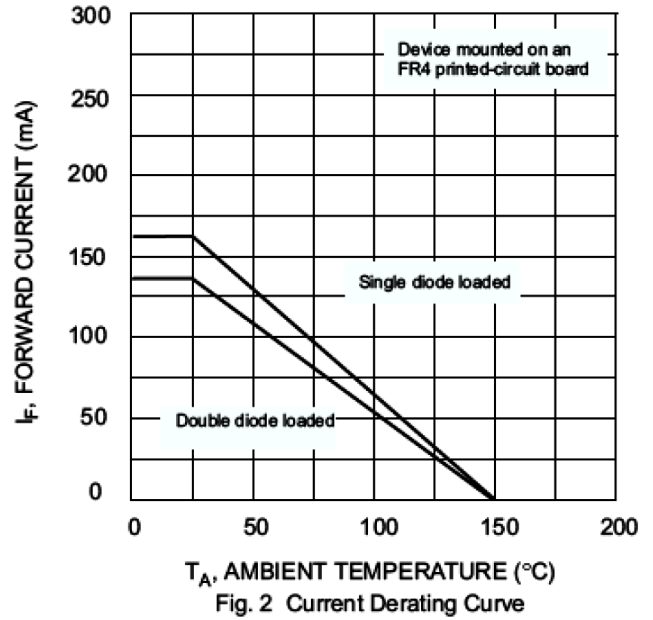
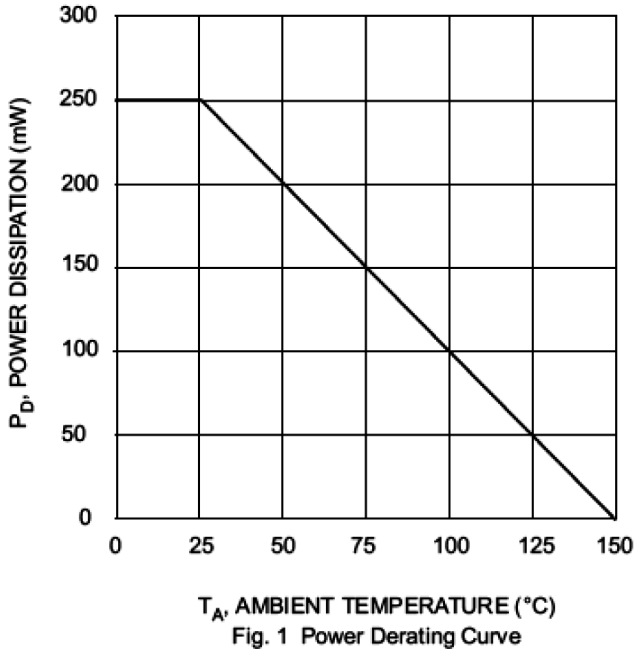
Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse breakdown voltage	V <sub>(BR)</sub>	I <sub>R</sub> = 100µA	85	-	V
Reverse voltage leakage current	I <sub>R</sub>	V <sub>r</sub> = 75V V <sub>r</sub> = 75V, T <sub>j</sub> = 150°C	-	5 80	nA
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 1mA I <sub>F</sub> = 10mA I <sub>F</sub> = 50mA I <sub>F</sub> = 150mA	-	900 1,000 1,100 1,250	mV
Junction capacitance	C <sub>J</sub>	V <sub>R</sub> = 0V, f = 1MHz	-	5	ns
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> = I <sub>R</sub> = 10mA, I <sub>rr</sub> = 0.1 × I <sub>R</sub> , R <sub>L</sub> = 100Ω	-	3	pF

Newark.com/multicomp-pro  
Farnell.com/multicomp-pro  
Element14.com/multicomp-pro

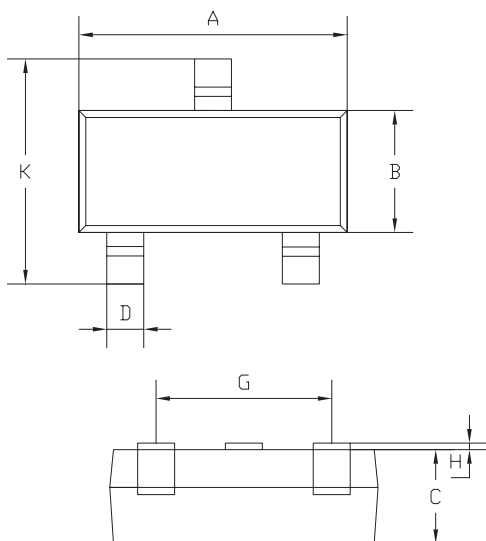
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# Dual Surface Mount Low Leakage Diode

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



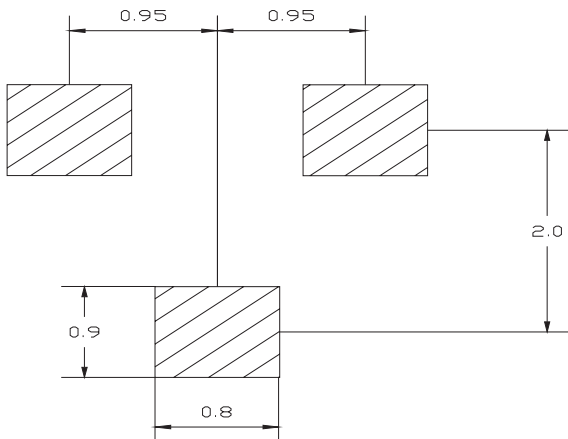
## Plastic surface mounted package



SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1 Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1 Typical	
K	2.35	2.45
All Dimensions in mm		

# Dual Surface Mount Low Leakage Diode

## Soldering Footprint



Unit : mm

## Package Information

Device	Package	Shipping
BAV199-7-F	SOT-23	3,000 / Tape & Reel

## Part Number Table

Description	Part Number
Dual surface mount low leakage diode	BAV199-7-F

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