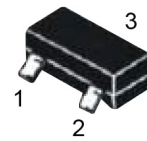
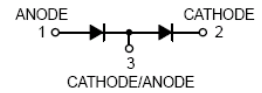
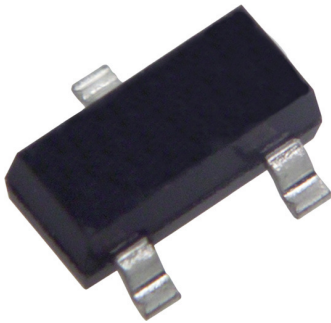


# Dual Surface Mount Low Leakage Diode



**SOT-523**

## Features:

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

## Applications:

- Small Signal Switching

## Maximum Ratings:

Ratings at 25°C unless otherwise specified.

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage working peak reverse voltage DC Reverse voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	85	V
RMS reverse voltage	$V_{R(RMS)}$	60	V
Peak forward surge current at $t=1\mu s$ at $t=1ms$ at $t=1s$	$I_{FSM}$	4 1 0.5	A
Forward continuous current single diode double diode	$I_{FM}$	160 140	mA
Repetitive peak forward current	$I_{FRM}$	500	mA
Power dissipation	$P_D$	150	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	500	°C/W
Operating and storage temperature range	$T_j, T_{STG}$	-65 to +150	°C



# Dual Surface Mount Low Leakage Diode



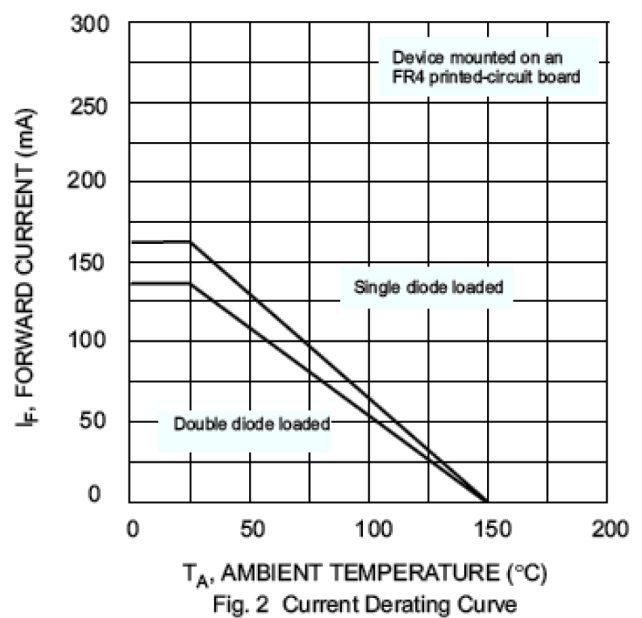
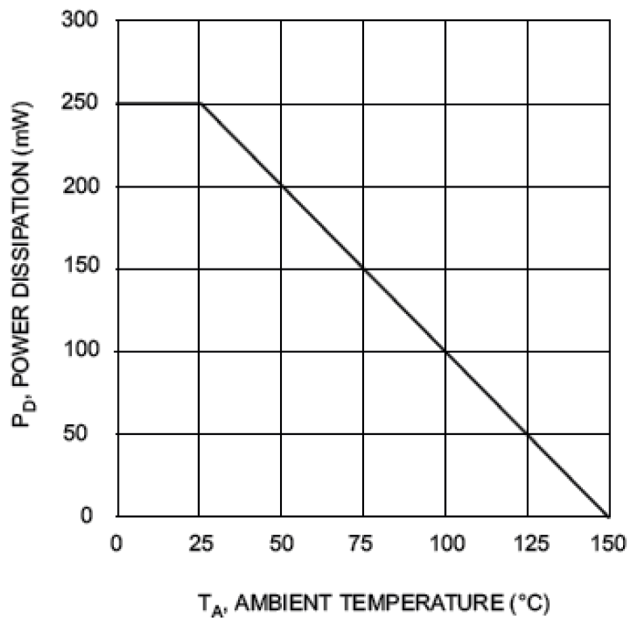
## Electrical Characteristics:

Ratings at 25°C unless otherwise specified

Parameter	Symbol	Test conditions	Min.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 100\mu A$	85	-	V
Reverse voltage leakage current	$I_R$	$V_R = 75V$ $V_R = 75V$ $T_J = 150^\circ C$	-	5 80	nA
Forward voltage	$V_F$	$I_F = 1mA$ $I_F = 10mA$ $I_F = 50mA$ $I_F = 150mA$	-	900 1,000 1,100 1,250	mV
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	$\mu S$

## Typical Characteristics:

$T_A = 25^\circ C$  unless otherwise specified

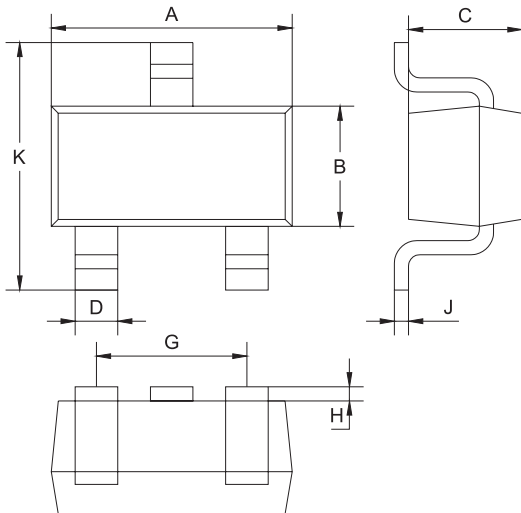


# Dual Surface Mount Low Leakage Diode



## Package Outline:

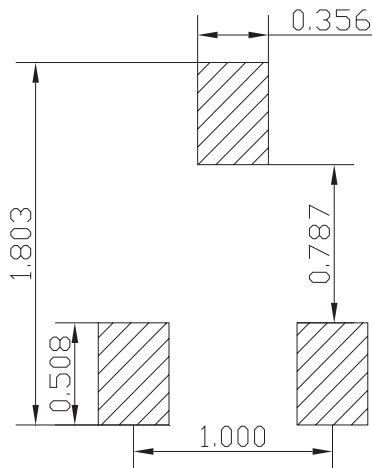
Plastic surface mounted package



SOT-523		
Dim.	Min.	Max.
A	1.5	1.7
B	0.75	0.85
C	0.6	0.8
D	0.15	0.3
G	0.9	1.1
H	0.02	0.1
J	0.1 Typ.	
K	1.45	1.75

Dimensions : Millimetres

## Soldering Footprint:



Dimensions : Millimetres

## Package Information:

Device	Package	Shipping
BAV199T-7-F	SOT-523	3,000 / Tape & Reel

## Part Number Table

Description	Part Number
Dual Surface Mount Low Leakage Diode	BAV199T-7-F

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