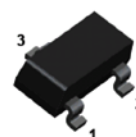
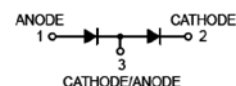


Dual Surface Mount Low Leakage Diode



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

Parameter	Symbol	Limits	Unit
Repetitive peak reverse voltage Working peak reverse voltage DC reverse voltage	V_{RRM} V_{RMS} V_R	85	V
RMS reverse voltage	$V_{R(RMS)}$	60	V
Peak forward surge current @ $t=1.0\mu\text{s}$ @ $t=1.0\text{ms}$ @ $t=1.0\text{s}$	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	250	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Operating and storage temperature range	T_J, T_{STG}	-65 to +150	$^\circ\text{C}$

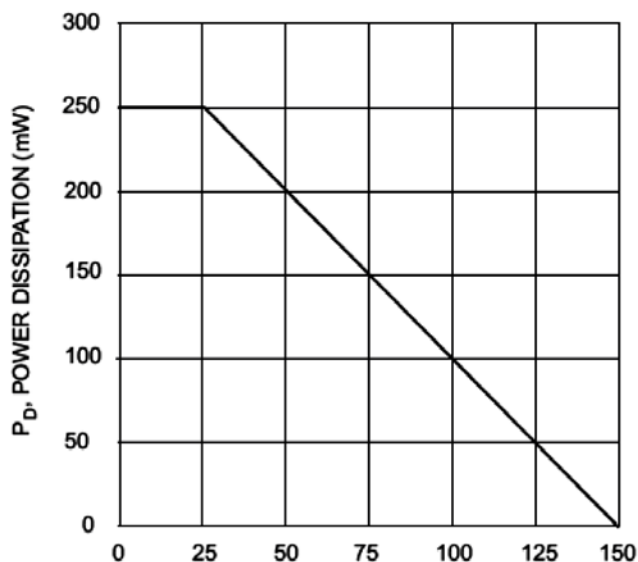
Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 100\mu\text{A}$	85	-	V
Reverse voltage leakage current	I_R	$V_R = 75\text{V}$ $V_R = 75\text{V}, T_J = 150^\circ\text{C}$	-	5 80	nA
Forward voltage	V_F	$I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 50\text{mA}$ $I_F = 150\text{mA}$	-	900 1,000 1,100 1,250	mV
Junction capacitance	C_J	$V_R = 0\text{V}, f = 1\text{MHz}$	-	5	ns
Reverse recovery time	t_{rr}	$I_F = I_R = 10\text{mA}$, $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$	-	3	pF

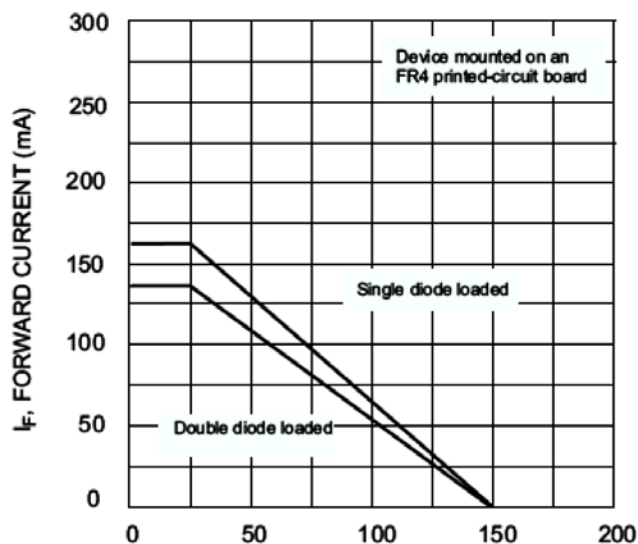
Dual Surface Mount Low Leakage Diode



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

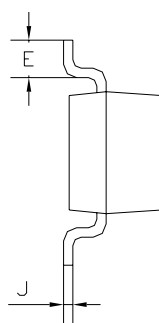
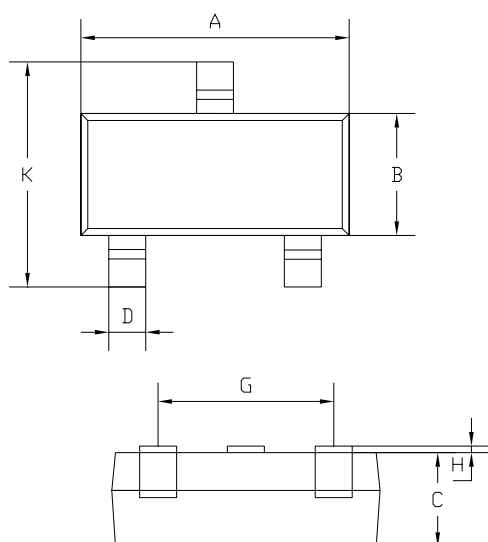


T_A , AMBIENT TEMPERATURE ($^\circ\text{C}$)
Fig. 1 Power Derating Curve



T_A , AMBIENT TEMPERATURE ($^\circ\text{C}$)
Fig. 2 Current Derating Curve

Plastic surface mounted package

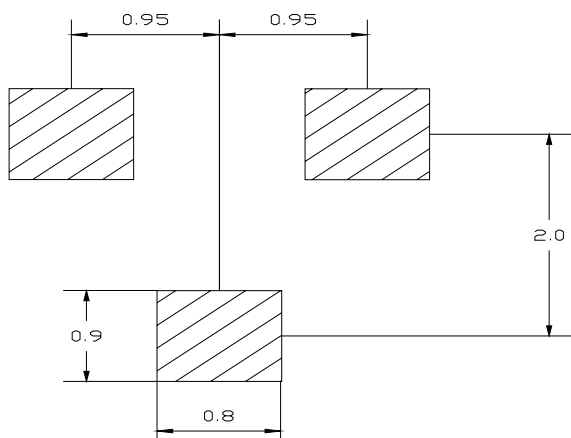


SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1 Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1 Typical	
K	2.35	2.45
All Dimensions in mm		

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

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell plc 2012.