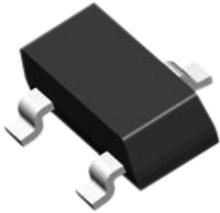
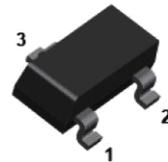
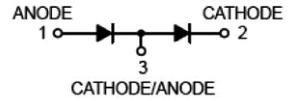


Dual Series Switching Diode



Features:

- Fast Switching Speed :6ns (Max.)
- High Conductance
- Connected In Series
- Surface Mount Package Ideally Suited for Automatic Insertion



SOT-23

Applications:

Small signal switching

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

Parameter	Symbol	Limits	Unit
Repetitive peak reverse voltage	V_{RRM}	85	V
Continuous reverse voltage	V_R	75	V
Peak forward surge current	I_{FSM}	4 1 0.5	A
	@t = 1μs @t = 1ms @t = 1s		
Forward continuous current (Max.)	I_F	215 125	mA
	Single diode loaded Both diodes loaded		
Non-Repetitive peak forward current	I_{FRM}	450	mA
Power dissipation	P_D	250	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	500	°C/W
Junction and storage temperature	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	$V_{(BR)}$	$I_R = 2.5\mu A$	75	-	V
Reverse voltage leakage current	I_R	$V_R = 25V$ $V_R = 75V$ $V_R = 25V, T_j = 150^\circ C$ $V_R = 75V, T_j = 150^\circ C$	-	35 1 30 50	nA μA μA μA
Forward voltage	V_F	$I_F = 1mA$ $I_F = 10mA$ $I_F = 50mA$ $I_F = 150mA$	-	715 855 1,000 1,250	V
Diode capacitance	C_D	$V_r = 0V, f = 1MHz$	-	1.5	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 10mA,$ $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$	-	4	ns

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

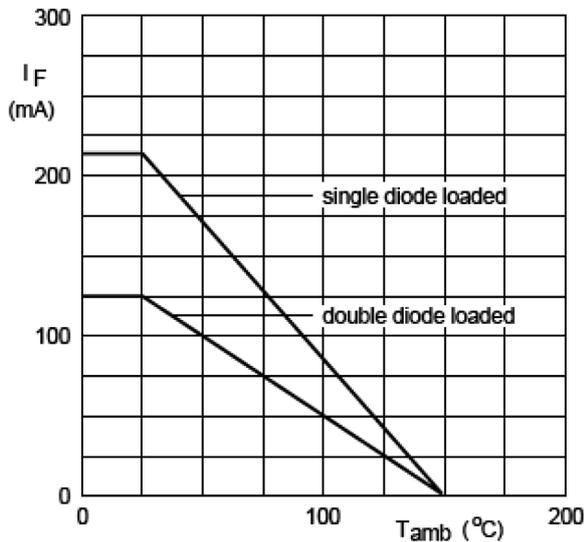
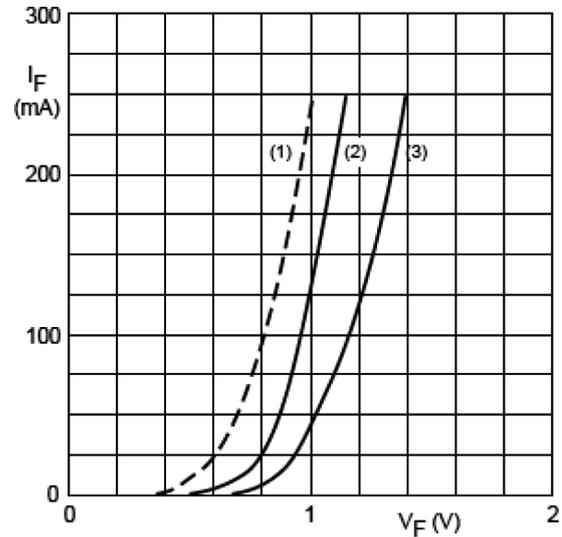


Fig.2 Maximum permissible continuous forward current as a function of ambient temperature.



- (1) $T_j = 150^\circ\text{C}$; typical values.
- (2) $T_j = 25^\circ\text{C}$; typical values.
- (3) $T_j = 25^\circ\text{C}$; maximum values.

Fig.3 Forward current as a function of forward voltage.

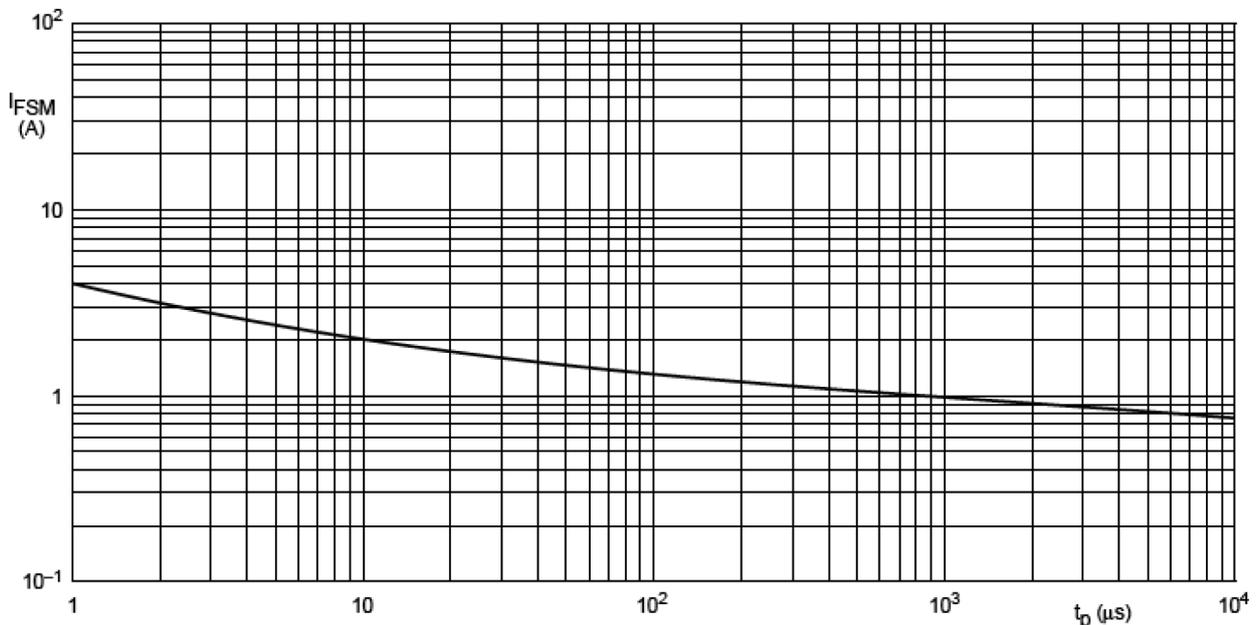


Fig.4 Maximum permissible non-repetitive peak forward current as a function of pulse duration.

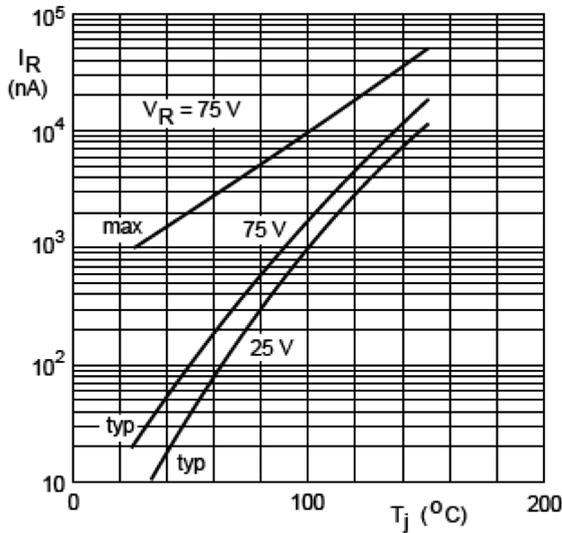


Fig.5 Reverse current as a function of junction temperature.

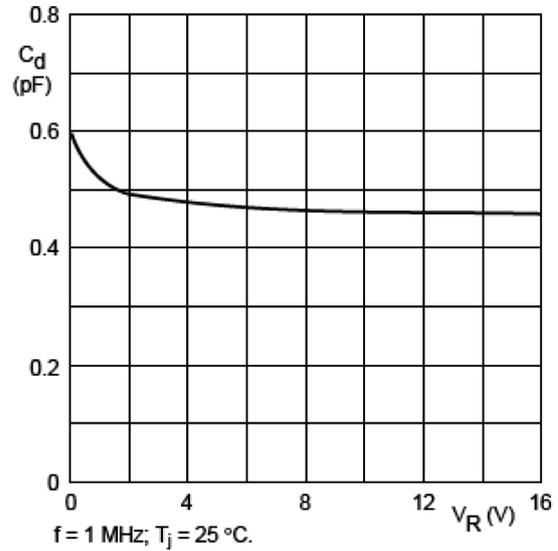
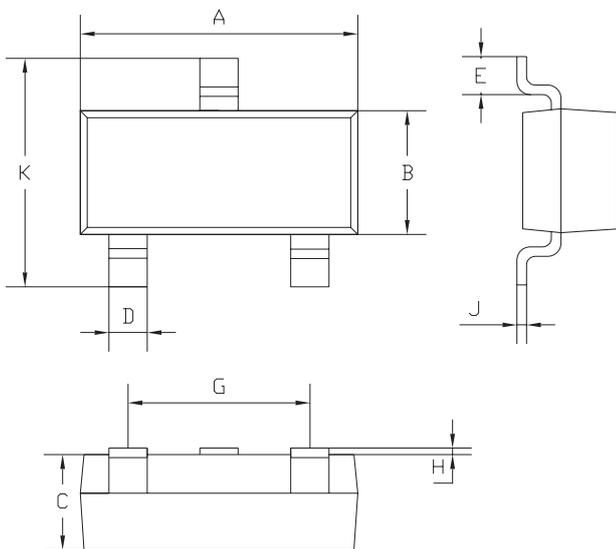


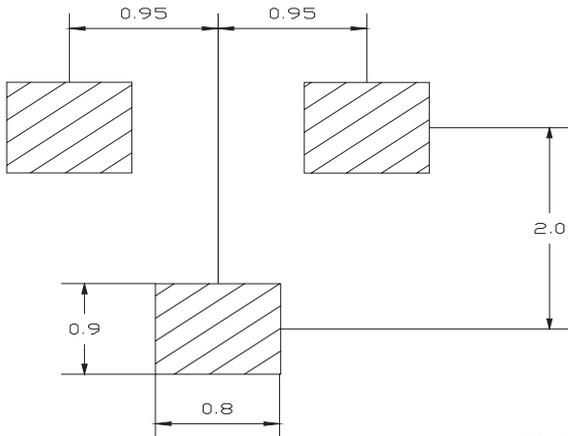
Fig.6 Diode capacitance as a function of reverse voltage; typical values.

Plastic surface mounted package



SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1Typical	
K	2.35	2.45
All Dimensions in mm		

Soldering Footprint



Unit : mm

Package Information

Device	Package	Shipping
BAV99-7-F	SOT-23	3,000 / Tape & Reel

Part Number Table

Description	Part Number
Dual series switching diode	BAV99-7-F

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET 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 Pro is the registered trademark of Premier Farnell Limited 2019.