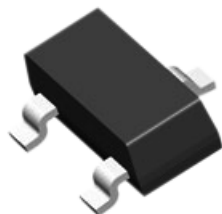
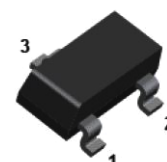


Dual Series Switching Diode



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 @ T_A = 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 @t = 1μs @t = 1ms @t = 1s	I _{FSM}	4 1 0.5	A
Forward continuous current (Max.) Single diode loaded Both diodes loaded	I _F	215 125	mA
Non-Repetitive peak forward current	I _{FRM}	450	mA
Power dissipation	P _D	250	mW
Thermal resistance junction to ambient air	R _{θJA}	500	°C/W
Junction and storage temperature	T _j , T _{STG}	-65 to +150	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse breakdown voltage	V _(BR)	I _R = 2.5μA	75	-	V
Reverse voltage leakage current	I _R	V _R = 25V V _R = 75V V _R = 25V, T _j = 150°C V _R = 75V, T _j = 150°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 × I _R , R _L = 100Ω	-	4	ns

Dual Series Switching Diode

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

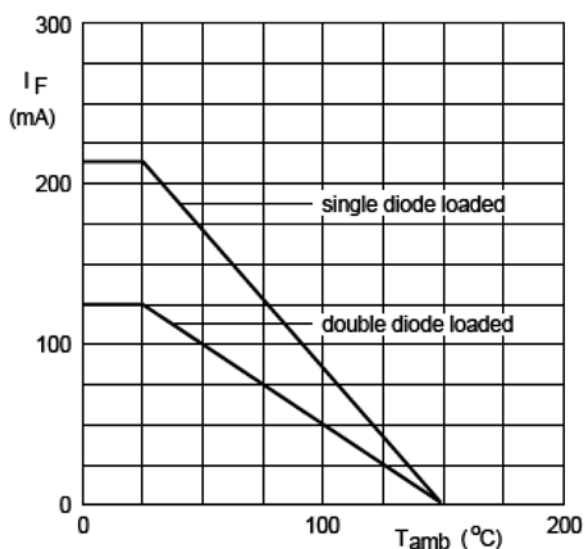
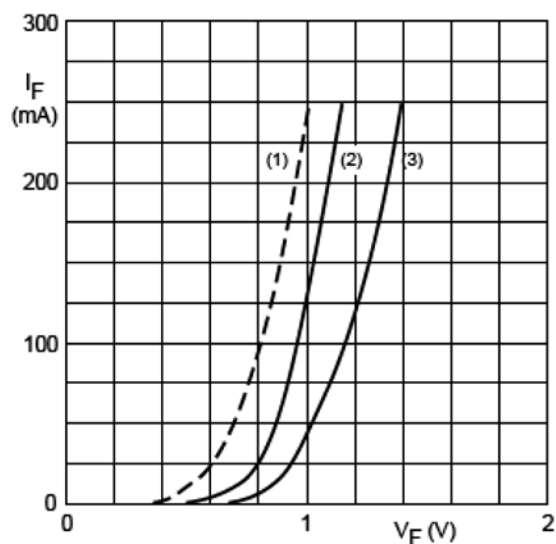


Fig.2 Maximum permissible continuous forward current as a function of ambient temperature.



- (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.

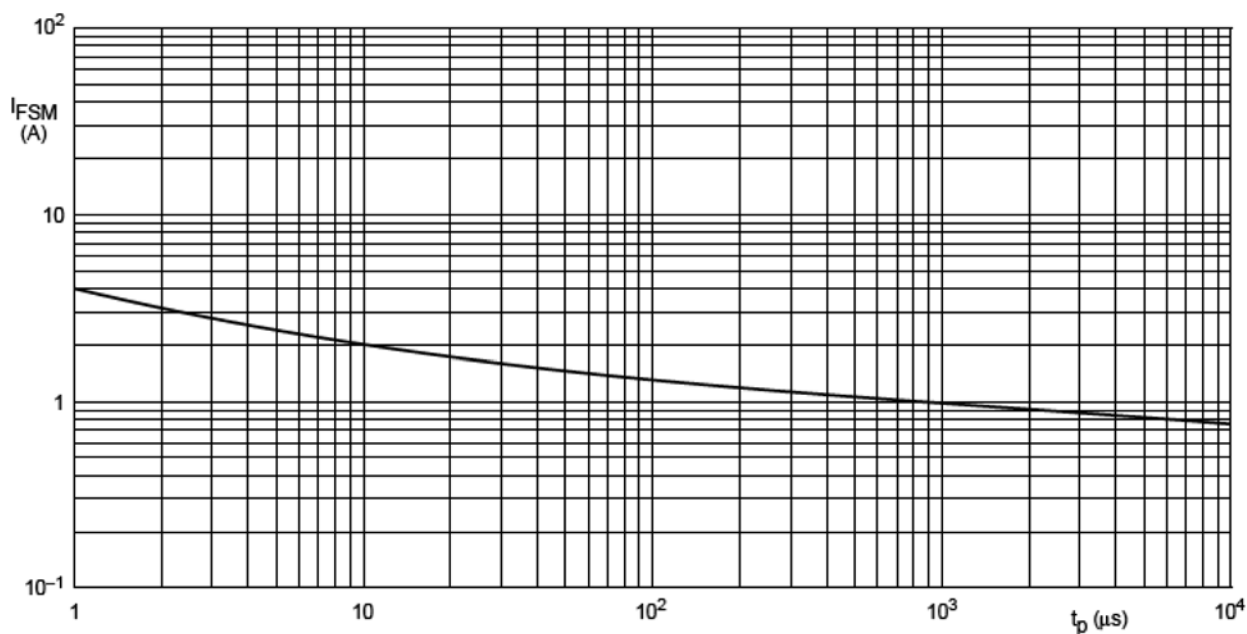


Fig.4 Maximum permissible non-repetitive peak forward current as a function of pulse duration.

Dual Series Switching Diode

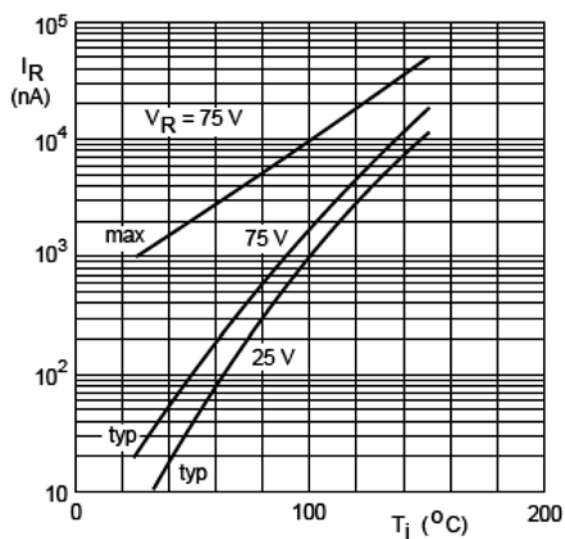


Fig.5 Reverse current as a function of junction temperature.

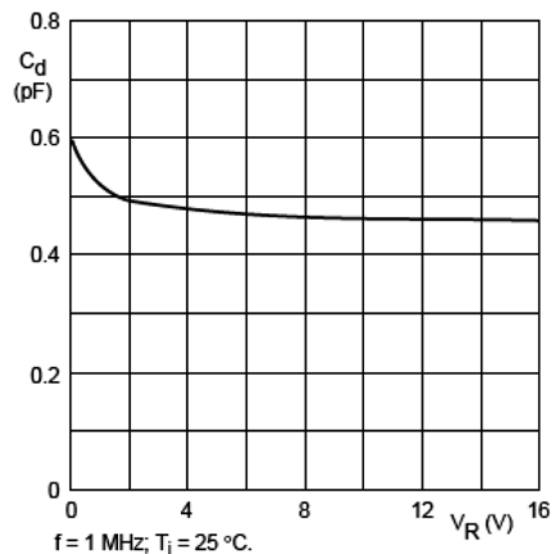
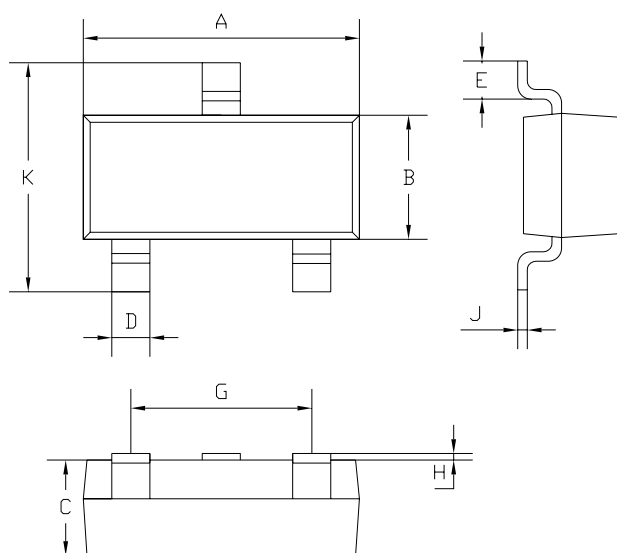


Fig.6 Diode capacitance as a function of reverse voltage; typical values.

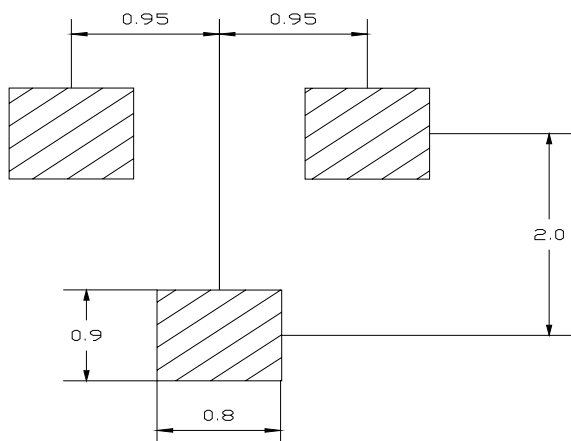
Plastic surface mounted package



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		

Dual Series Switching Diode

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

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