

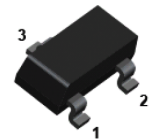
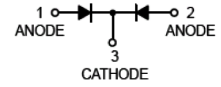
Low-Leakage Double Diode

multicomp PRO



Features:

- Plastic SMD Package
- Low Leakage Current : Typ. 3pA
- Switching Time : Typ. 0.8ms
- Continuous Reverse Voltage : 75V Max.
- Repetitive Peak Reverse Voltage : 85V Max.
- Repetitive Peak Forward Current : 500mA Max.



SOT-23

Applications:

Low-leakage current applications in surface mounted circuits

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

Parameter	Symbol	Limits	Unit
Repetitive peak reverse voltage	VRRM	85	V
DC Reverse Voltage	VR	75	V
Forward continuous current Single diode loaded Double diode loaded	IF	215 125	mA
Repetitive peak forward current	IFRM	500	mA
Non-Repetitive peak forward current square wave; Tj = 25C prior to surge; tp=1µs tp=1ms tp=1s	IFSM	4 1 0.5	A
Total power dissipation	P _{tot}	250	mW
Operating junction temperature range	T _j	150	°C
Storage temperature range	TSTG	-65 to +150	°C

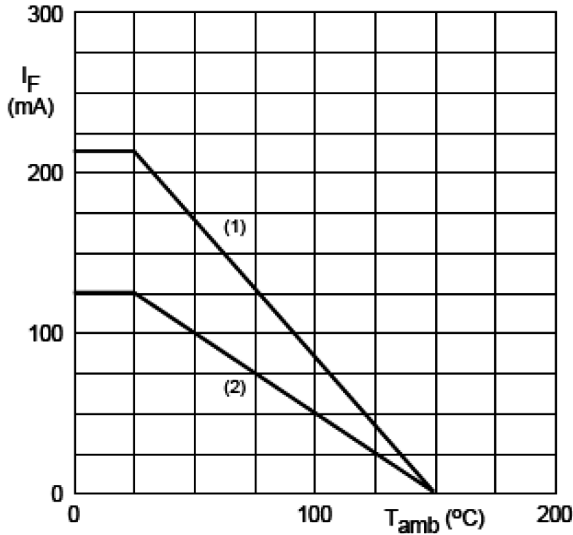
Electrical Characteristics @ TA = 25°C unless otherwise specified

Parameter	Symbol	Conditions	Typ.	Max.	Unit
Forward voltage	V _F	IF = 1mA IF = 10mA IF = 50mA IF = 100mA	-	900 1,000 1,100 1,250	mV
Reverse leakage current	I _R	VR = 75V VR = 75V, T _J =150°C	0.003 3	5 80	nA
Junction capacitance	C _J	VR = 0V, f = 1MHz	2	-	pF
Reverse recovery time	t _{rr}	IF = IR = 10mA, I _{rr} = 0.1 × I _R	0.8	3	µs

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sg.element14.com/b/multicomp-pro

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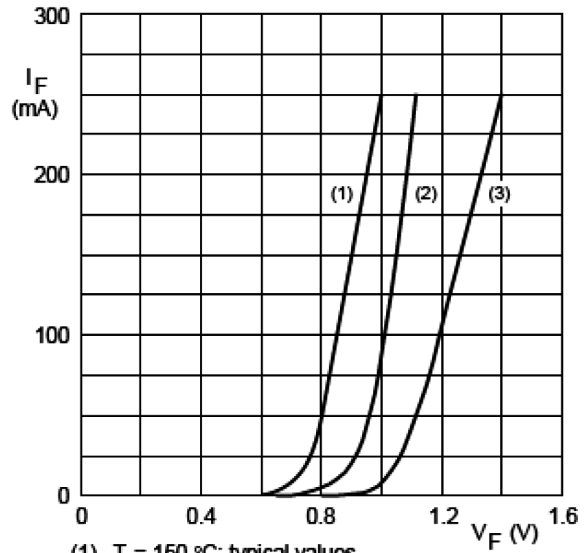
Typical Characteristics @ TA = 25°C unless otherwise specified



Device mounted on a FR4 printed-circuit board.

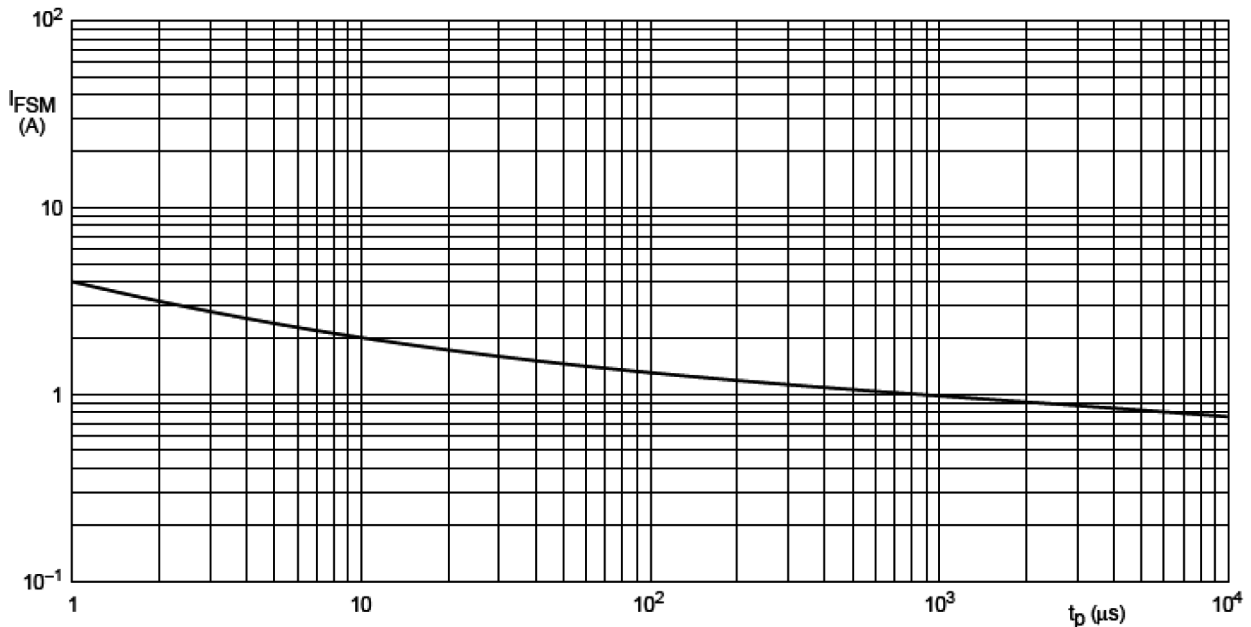
- (1) Single diode loaded.
- (2) Double diode loaded.

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

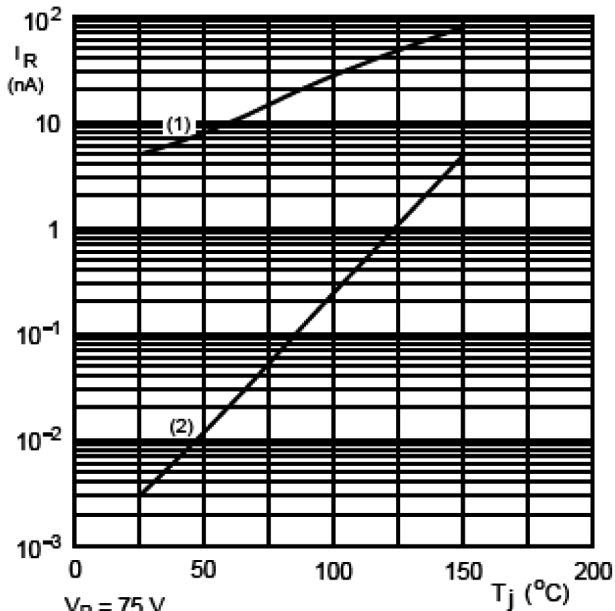


- (1) $T_j = 150^\circ\text{C}$; typical values.
- (2) $T_j = 25^\circ\text{C}$; typical values.
- (3) $T_j = 25^\circ\text{C}$; maximum values.

Forward current as a function of forward voltage; per diode.



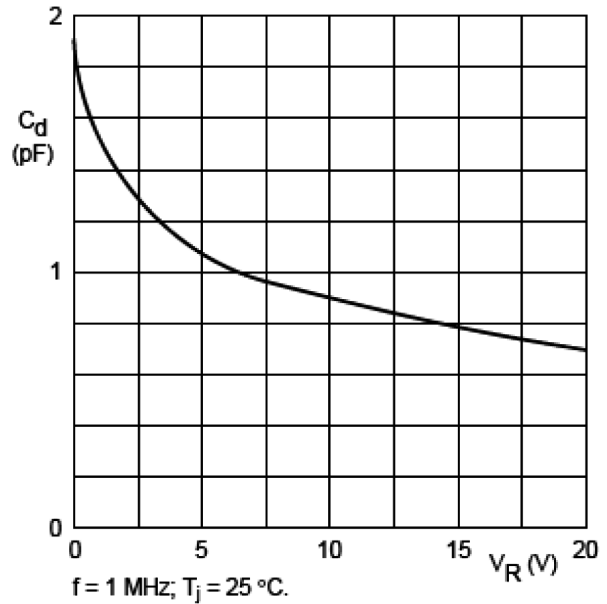
Maximum permissible non-repetitive peak forward current as a function of pulse duration per diode.



(1) Maximum values.

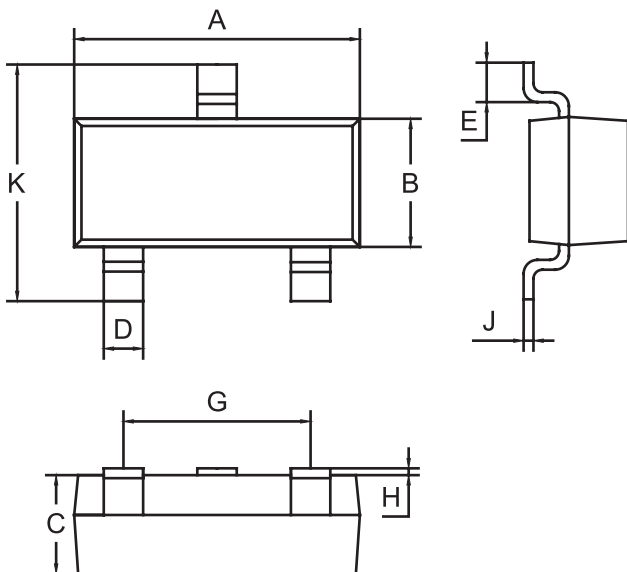
(2) Typical values.

Reverse current as a function of junction temperature; per diode.



Diode capacitance as a function of reverse voltage; per diode; typical values.

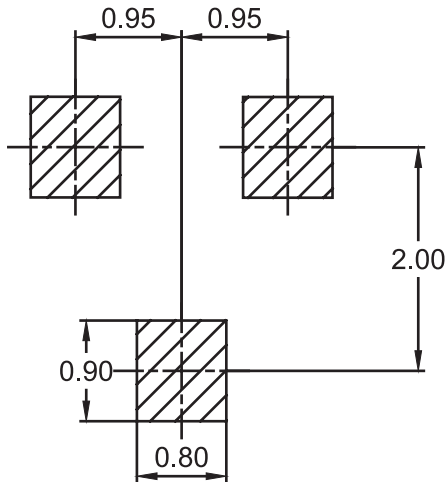
Plastic surface mounted package



Dim.	Min.	Max.
A	2.7	3.1
B	1.1	1.5
C	0.9	1.1
D	0.3	0.5
E	0.35	0.48
G	1.8	2
H	0.02	0.1
J	0.05	0.15
K	2.2	2.6

Dimensions : Millimetres

Soldering Footprint



Package Information

Device	Marking	Package	Shipping
BAV170-7-F	JX	SOT-23	3,000 / Tape & Reel

Part Number Table

Description	Part Number
Low-leakage Double Diode	BAV170-7-F

Dimensions : Millimetres

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