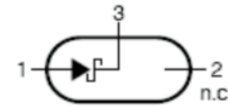
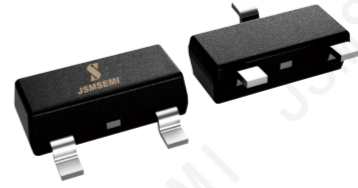


Features

- ◆ Fast Switching Speed
- ◆ Surface Mount Package Ideally Suited for Automatic Insertion
- ◆ High Conductance
- ◆ For General Purpose Switching Applications

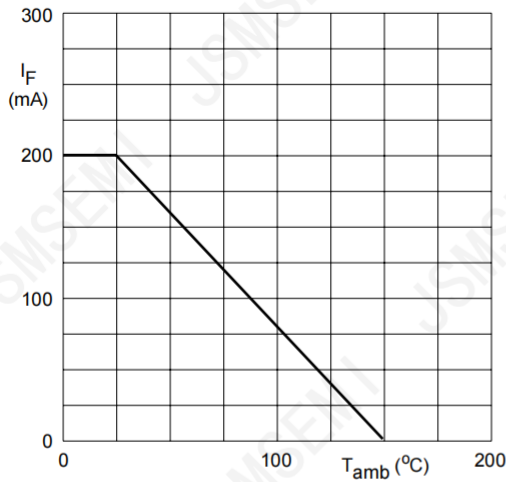

Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _R	250	V
Forward Current	I _F	200	mA
Power Dissipation	P _D	200	mW
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

Electrical Characteristics Ta = 25°C

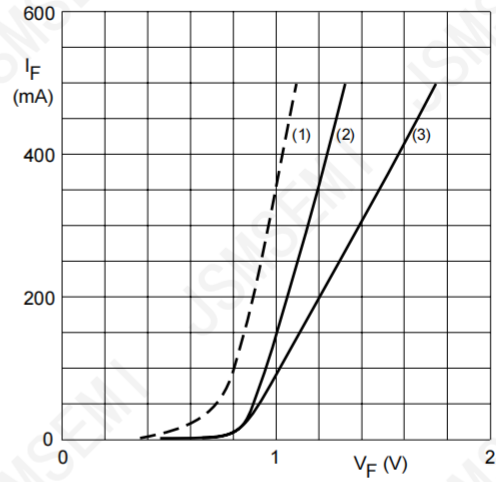
Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	V _(BR)	I _R =100 μ A	250			V
Forward Voltage	V _F	I _F =100mA I _F =200mA			1.0 1.25	V
Reverse Leakage	I _R	V _R =200V			100	nA
Junction Capacitance	C _j	V _R =0V, f=1.0MHz			5.0	pF
Reverse Recover Time	T _{rr}				50	nS

Typical Characteristics



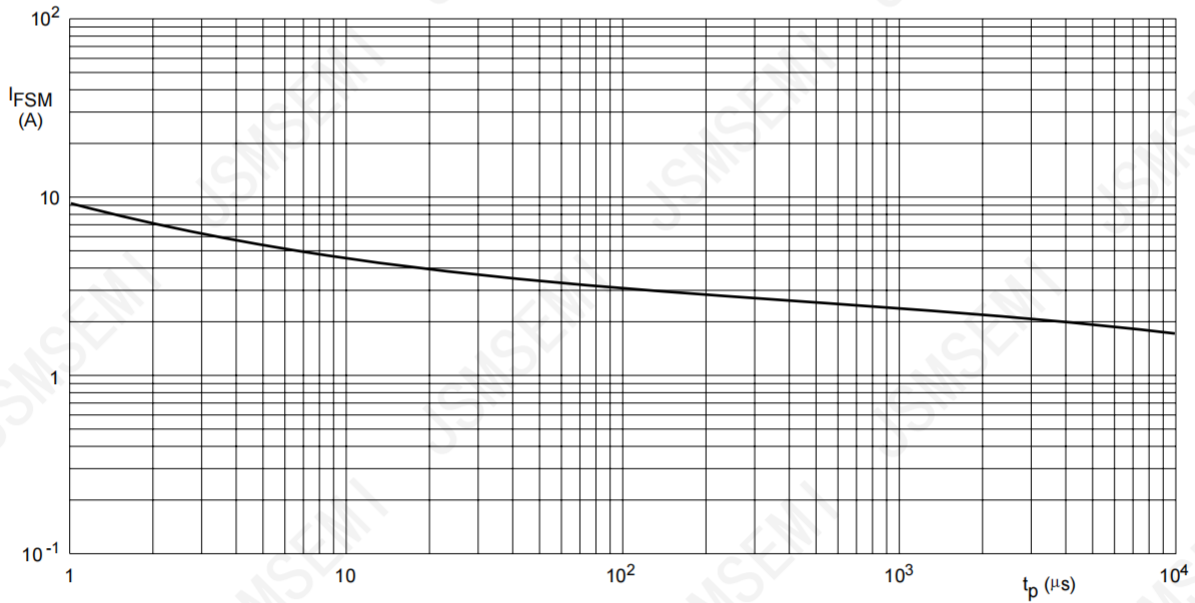
Device mounted on an FR4 printed-circuit board.

Fig.1 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.

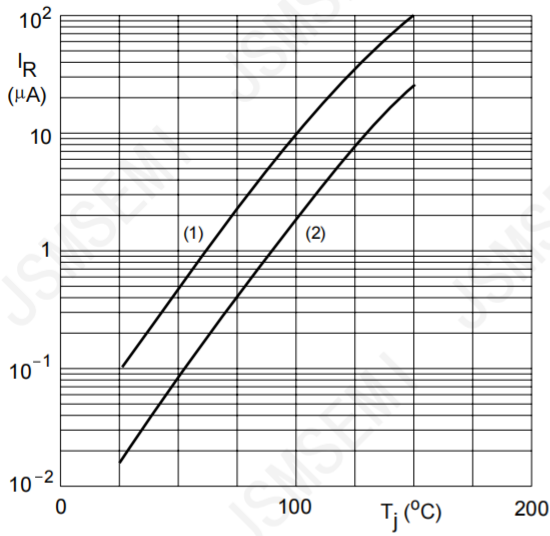
Fig.2 Forward current as a function of forward voltage.



Based on square wave currents.
 $T_j = 25^\circ\text{C}$ prior to surge.

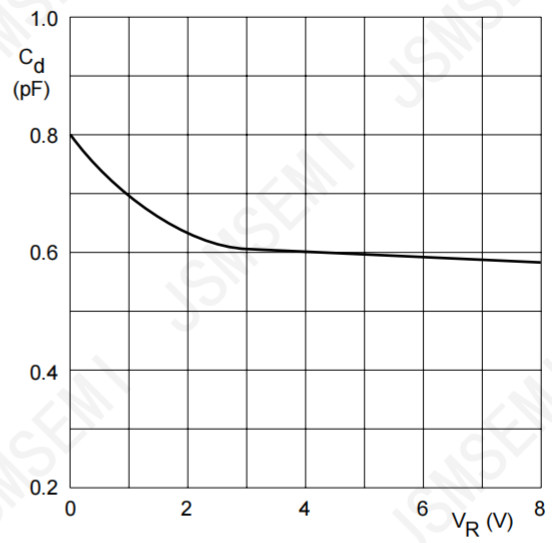
Fig.3 Maximum permissible non-repetitive peak forward current as a function of pulse duration.

Typical Characteristics



- (1) $V_R = V_{Rmax}$; maximum values.
- (2) $V_R = V_{Rmax}$; typical values.

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



$f = 1 \text{ MHz}; T_j = 25 \text{ °C}.$

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

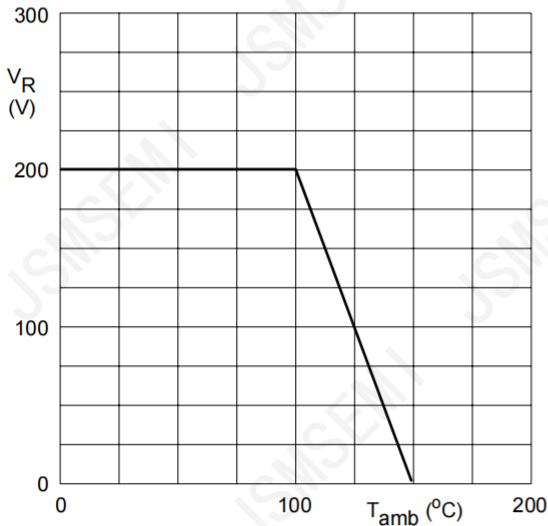
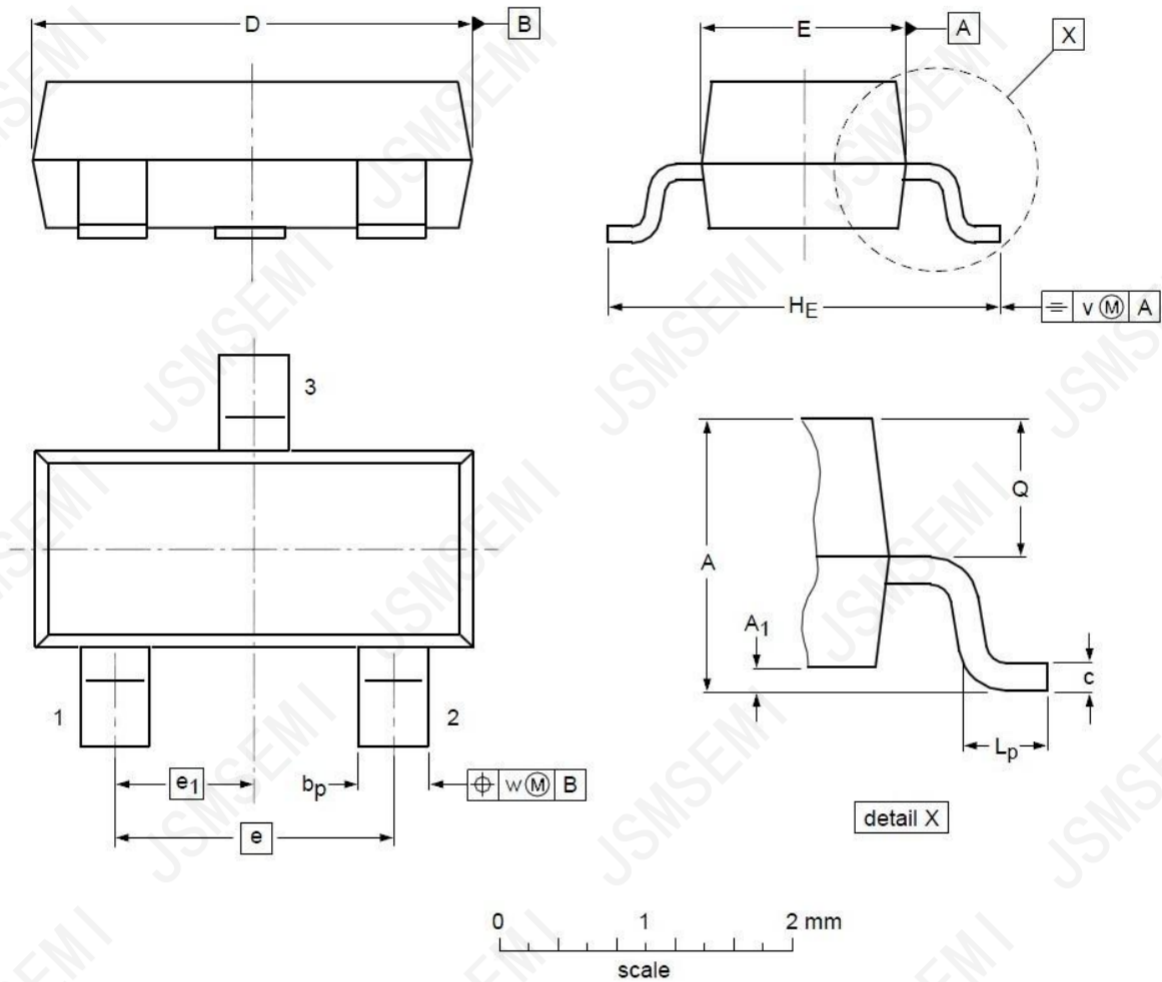


Fig.7 Maximum permissible continuous reverse voltage as a function of the ambient temperature.

Package Information

SOT-23-3



DIMENSIONS (unit : mm)

Symbol	Min	Typ	Max	Symbol	Min	Typ	Max
A	0.90	1.01	1.15	A ₁	0.01	0.05	0.10
b _p	0.30	0.42	0.50	c	0.08	0.13	0.15
D	2.80	2.92	3.00	E	1.20	1.33	1.40
e	--	1.90	--	e ₁	--	0.95	--
H _E	2.25	2.40	2.55	L _p	0.30	0.42	0.50
Q	0.45	0.49	0.55	v	--	0.20	--
w	--	0.10	--				

Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

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