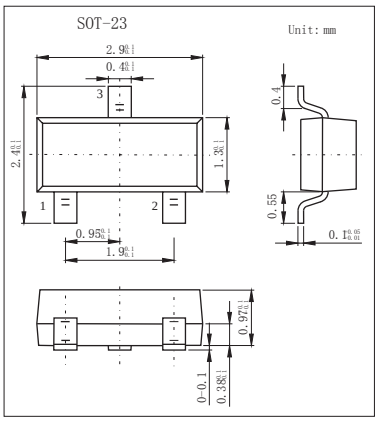
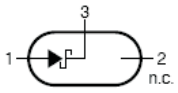
Switching Diodes
1KS3005,6,7,8

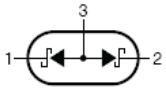


■ Features

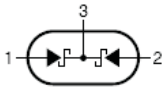
- ●Fast Switching Speed
- ●Surface Mount Package Ideally Suited for Automatic Insertion
- ●High Conductance
- ●For General Purpose Switching Applications



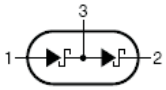
1KS3005



1KS3007



1KS3006



1KS3008

■ Absolute Maximum Ratings Ta = 25℃

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	℃
Storage Temperature Range	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

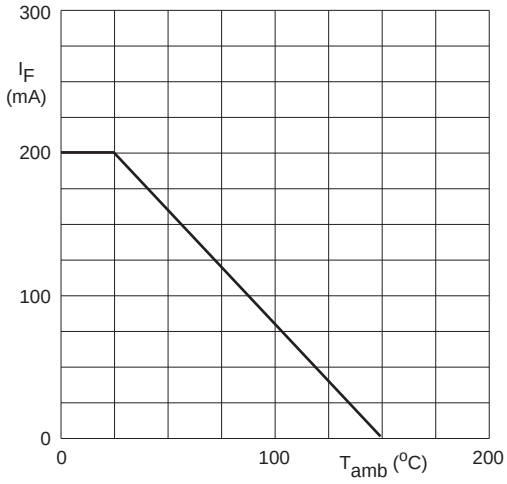
Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	I_R=100 μ A	250			V
Forward Voltage	V_F	I_F=100mA I_F=200mA			1.0 1.25	V
Reverse Leakage	I_R	V_R=200V			100	nA
Junction Capacitance	C_j	V_R=0V, f=1.0MHz			5.0	pF
Reverse Recover Time	T_{rr}				50	nS

■ Marking

NO.	1KS3005	1KS3006	1KS3007	1KS3008
Marking	SS5	SS6	SS7	SS8

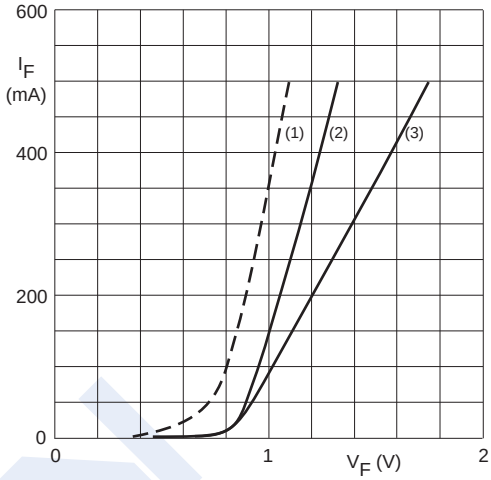
1KS3005,6,7,8

■ Typical Characterisitics



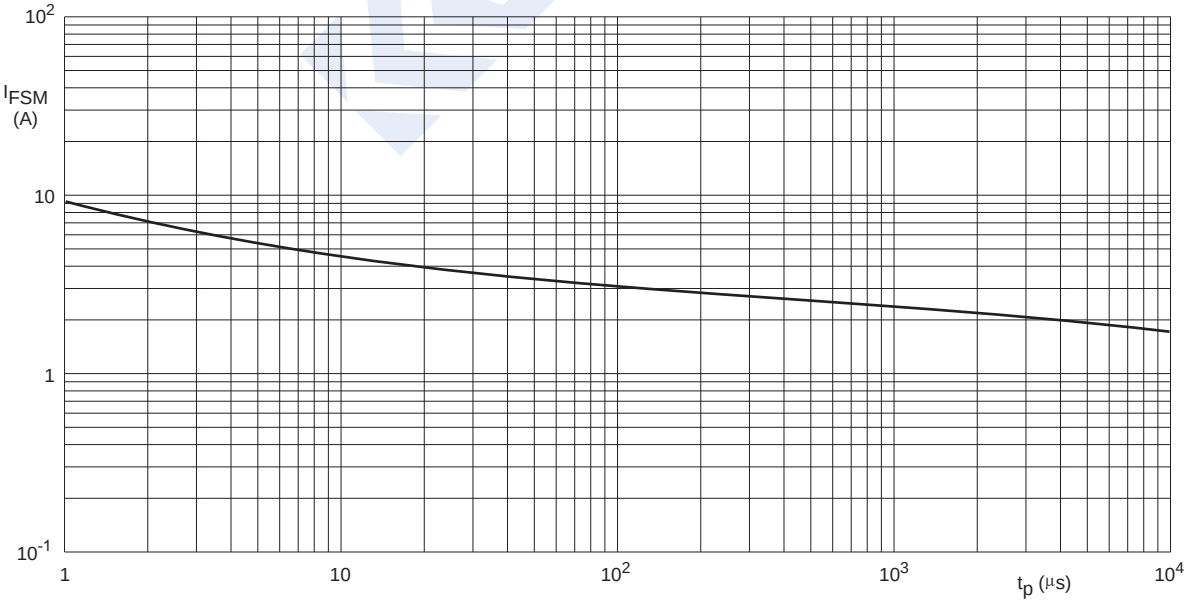
Device mounted on an FR4 printed-circuit board.

Fig.1 Maximum permissible continuous forward current as a function of ambient temperature.



(1) T_j = 150 °C; typical values.
(2) T_j = 25 °C; typical values.
(3) T_j = 25 °C; maximum values.

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

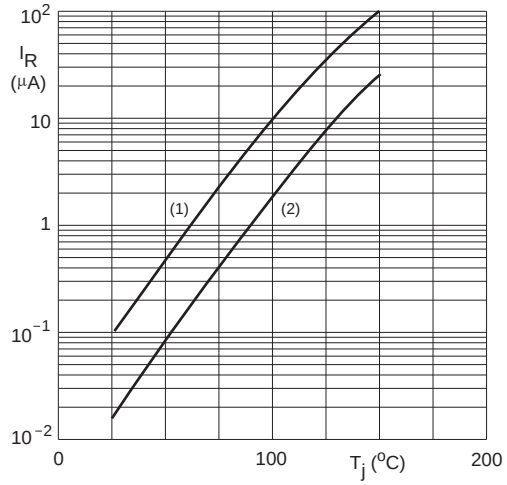


Based on square wave currents.
T_j = 25 °C prior to surge.

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

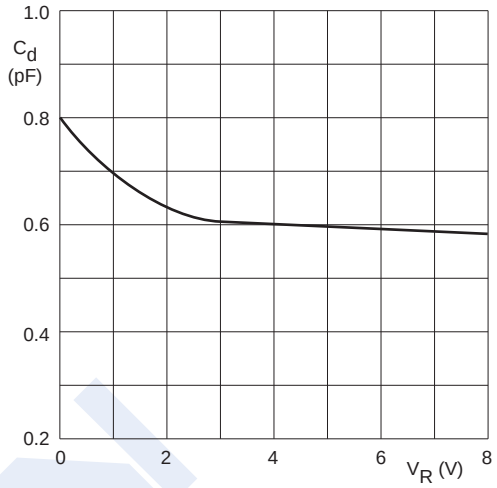
1KS3005,6,7,8

■ Typical Characterisitics



(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 MHz; T_j = 25 °C.

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

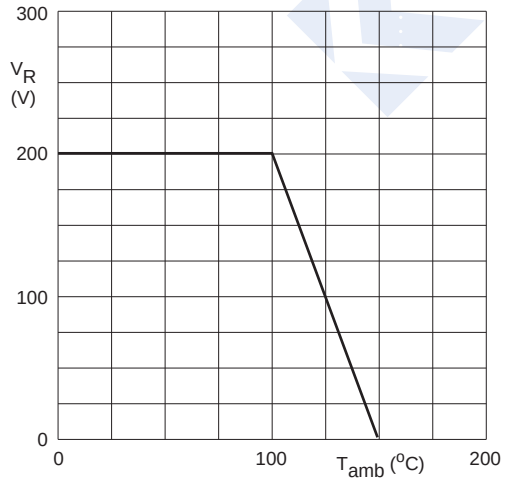


Fig.7 Maximum permissible continuous reverse voltage as a function of the ambient temperature.