

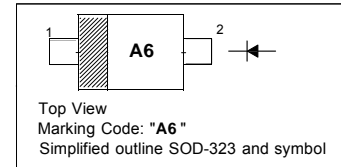
Applications

- High-speed switching

MARKING:A6

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Reverse Voltage	V _R	100	V
Continuous Forward Current	I _F	250	mA
Repetitive Peak Forward Current	I _{FRM}	500	mA
Non-Repetitive Peak Forward Current	I _{FSM}	4 1 0.5	A
		t = 1 μs	
		t = 1 ms	
		t = 1 s	
Total Power Dissipation	P _{tot}	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 65 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Max.	Unit
Forward Voltage at I _F = 1 mA at I _F = 10 mA at I _F = 50 mA at I _F = 150 mA	V _F	0.715 0.855 1 1.25	V
Reverse Current at V _R = 25 V at V _R = 75 V at V _R = 25 V, T _J = 150 °C at V _R = 75 V, T _J = 150 °C	I _R	30 1 30 50	nA μA μA μA
Diode Capacitance at V _R = 0 V, f = 1 MHz	C _{tot}	1.5	pF
Reverse Recovery Time at I _F = I _R = 10 mA, I _{rr} = 0.1 X I _R , R _L = 100 Ω	t _{rr}	4	ns

Typical Characteristics

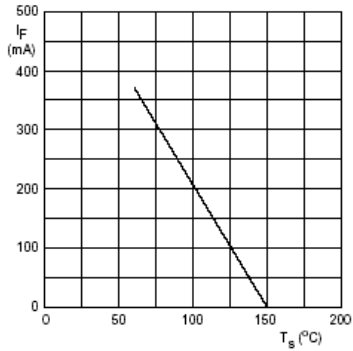
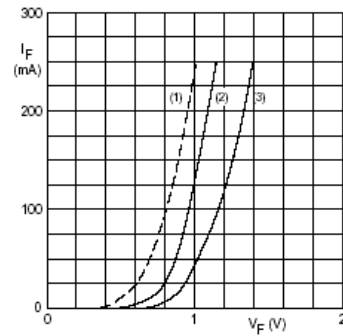
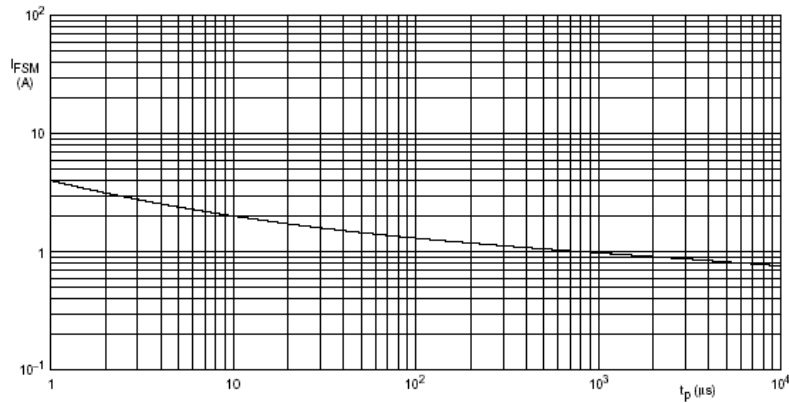


Fig. 1 Maximum permissible continuous forward current as a function of soldering point temperature.



(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.

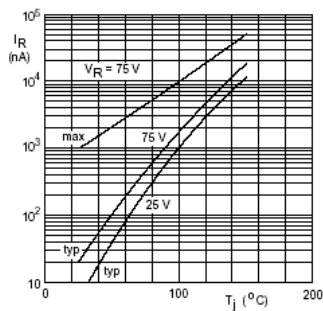
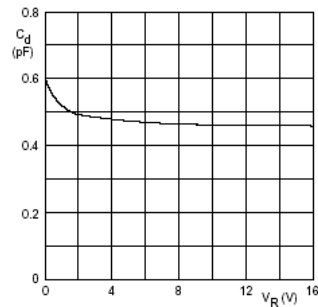


Fig. 4 Reverse current as a function of junction temperature.



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

Fig. 5 Diode capacitance as a function of reverse voltage; typical values.

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323

