SCHOTTKY BARRIER DIODE

Features

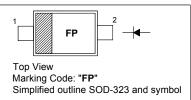
- · Ultra high-speed switching
- · Very low forward voltage
- · Very small SMD plastic package

Applications

- Ultra high-speed switching
- Voltage clamping
- Protection circuits

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode
	•



Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	20	V
Continuous Forward Current	I _F	1	Α
Non-repetitive Peak Forward Current (t = 8.3 ms Half Sine Wave, JEDEC method)	I _{FSM}	5	А
Junction Temperature	T_J	125	°C
Operating Ambient Temperature Range	T _{op}	- 65 to + 125	°C
Storage Temperature Range	T _{stg}	- 65 to + 150	°C
Thermal Resistance from Junction to Ambient	$R_{ heta JA}$	220 ¹⁾ 180 ²⁾	K/W

Characteristics at T_a = 25 °C

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 10 \text{ mA}$ at $I_F = 100 \text{ mA}$ at $I_F = 1 \text{ A}$	V _F	0.27 0.35 0.65	٧
Reverse Current at $V_R = 5 \text{ V}$ at $V_R = 8 \text{ V}$ at $V_R = 15 \text{ V}$	I _R	10 20 50	μА
Diode Capacitance at V _R = 5 V, f = 1 MHz	C _d	25	pF

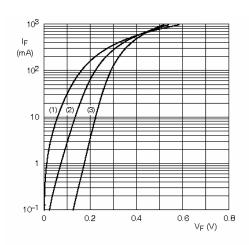






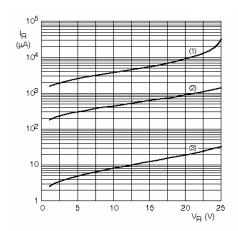
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¹⁾ Mounted on P.C.B. 10 X 10 mm² Cu 2) Mounted on P.C.B. 40 X 40 mm² Cu



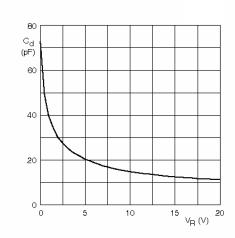
- (1) T_{amb} = 85 °C.
- (2) T_{amb} = 25 °C.
- (3) $T_{amb} = -40 \, ^{\circ}\text{C}$.

Forward current as a function of forward voltage; typical values.



- (1) $T_{amb} = 125 \text{ °C}.$
- (2) T_{amb} = 85 °G. (3) T_{amb} = 25 °G.

Reverse current as a function of reverse voltage; typical values.



T_{amb} = 25 °C; f = 1 MHz.

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



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ISO/TS 16949 : 2002 ISO 14001:2004 ISO 9001:2000 Certificate No. 05103 Certificate No. 7116 Certificate No. 0506098

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323

