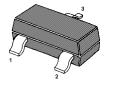
Silicon Epitaxial Planar Switching Diode

Features

- · Fast switching speed
- High Conductance





Marking Code: **5D** SOT-23 Plastic Package

Applications

• For general purpose switching

Absolute Maximum Ratings (T_a = 25 °C)

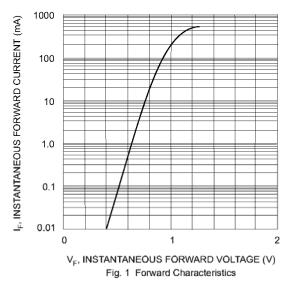
Parameter	Symbol	Value	Unit	
Peak Reverse Voltage	V_{RM}	100	V	
Reverse Voltage	V _R	75	V	
Average Rectified Forward Current	I _{F(AV)}	250	mA	
Forward Continuous Current	I _{FM}	500	mA	
Non-repetitive Peak Forward Surge Current at t = 1 s at t = 1	I I I I I I I I I I I I I I I I I I I	2 4	Α	
Power Dissipation	P_d	350	mW	
Junction and Storage Temperature Range	T_j , T_{stg}	- 65 to + 150	°C	

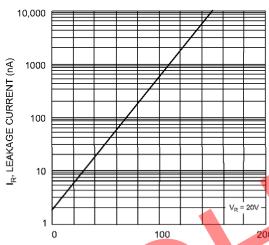
Characteristics at T = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 5$ mA at $I_F = 10$ mA at $I_F = 100$ mA at $I_F = 150$ mA	V _F	0.62 - - -	0.72 0.855 1 1.25	>
Reverse Current at $V_R = 20 \text{ V}$ at $V_R = 75 \text{ V}$ at $V_R = 25 \text{ V}$, $T_j = 150 ^{\circ}\text{C}$ at $V_R = 75 \text{ V}$, $T_j = 150 ^{\circ}\text{C}$	I _R	- - -	25 2.5 30 50	nA μΑ μΑ μΑ
Junction Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$	C _j	-	4	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



Dated: 15/06/2009





T_j, JUNCTION TEMPERATURE (°C)
Fig. 2 Leakage Current vs Junction Temperature



