

SWITCHING DIODE

REVERSE VOLTAGE: 75 VOLTS

CURRENT: 0.15 AMPERES

FEATURES

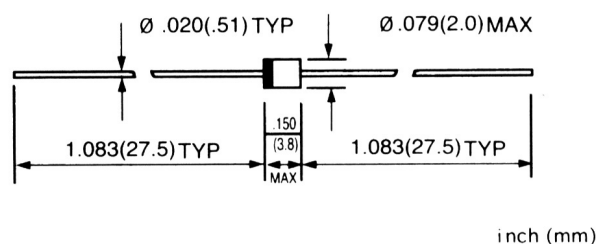
- Silicon epitaxial planar diode
- High speed switching diode
- 500mW power dissipation
- These diodes are also available in glass case Mini-MELF, SOD-323, SOT-323

MECHANICAL DATA

Case: DO-35 glass case

Polarity: Color band denotes cathode

Weight: 0.004ounce, 0.13 gram

DO-35(GLASS)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

MAXIMUM RATINGS

Parameters	Symbols	Value	UNITS
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Average Forward Rectified Current Half Wave Rectification with Resistive Load at $T_{amb}=25^\circ\text{C}$ and $f \geq 50\text{Hz}$	I_O	150	mA
Forward Surge Current	I_{FSM}	500	mA
Power Dissipation	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_J	175	°C
Storage Temperature Range	T_{STG}	-65---+175	°C

ELECTRICAL CHARACTERISTICS

Parameters	Symbols	MIN	MAX	UNITS
Forward Voltage at $I_F = 10\text{mA}$	V_F		1	V
Leakage Current at $V_R = 20\text{V}$	I_R		25	nA
at $V_R = 75\text{V}$	I_R		5	μA
at $V_R = 20\text{V}$ $T_J = 150^\circ\text{C}$	I_R		50	μA
Voltage Rise when Switching ON Tested with 50mA pulses $t_p = 0.1\mu\text{s}$. Rise Time < 30ns. $f_p = 5$ to 100Hz	V_{fr}		2.5	V
Capacitance at $V_F = V_R = 0\text{V}$, $f = 1\text{MHz}$	C_{tot}		4	pF
Reverse Recovery Time $I_F = 10\text{mA}$, $V_R = 6\text{V}$, $I_R = 1\text{mA}$, $R_L = 100\Omega$	t_{rr}		4	ns
Thermal Resistance Junction to Ambient	$R_{\theta JA}$		350 ¹⁾	K/W
Rectification Efficiency at 100MHz, $V_{FR} = 2\text{V}$	η_v	0.45		

Valid provided that leads at a distance of 8mm from case are kept at ambient temperature.