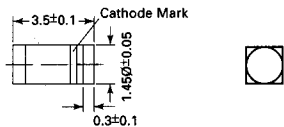


Silicon Exptaxial Planar Diode

fast switching diode in MiniMELF case especially suited for automatic surface mounting.
Identical electrically to standard JEDEC 1N4148

These diodes are delivered taped.
Details see "Taping".

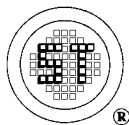


Glass case MiniMELF

Weight approx. 0.05g
Dimensions in mm

Absolute Maximum Ratings (T_a = 25 °C)

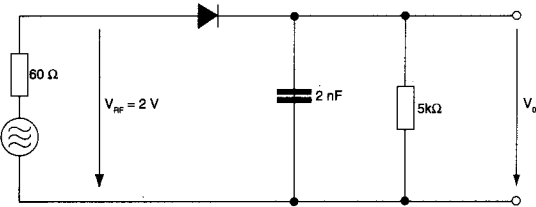
	Symbol	Value	Unit
Reverse Voltage	V _R	75	V
Peak Reverse Voltage	V _{RM}	100	V
Rectified Current (Average) Half Wave Rectification with Resist. Load at T _{amb} = 25 °C and f ≥ 50 Hz	I _o	150 ¹⁾	mA
Surge Forward Current at t < 1 s and T _j = 25 °C	I _{FSM}	500	mA
Power Dissipation at T _{amb} = 25 °C	P _{tot}	500 ¹⁾	mW
Junction Temperature	T _j	175	°C
Storage Temperature Range	T _s	-65 to + 175	°C
¹⁾ Valid provided that electrodes are kept at ambient temperature			



Characteristics at T_j = 25 °C

	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at I _F = 10 mA	V _F	-	-	1	V
Leakage Current at V _R = 20 V at V _R = 75 V at V _R = 20 V, T _j = 150 °C	I _R I _R I _R	- - -	- - -	25 5 50	nA μA μA
Reverse Breakdown Voltage tested with 100 μA Pulses	V _{(BR)R}	100	-	-	V
Capacitance at V _F = V _R = 0	C _{tot}	-	-	4	pF
Voltage Rise when Switching ON tested with 50 mA Forward Pulses tp = 0.1 s, Rise Time < 30ns, fp = 5 to 100 kHz	V _{fr}	-	-	2.5	V
Reverse Recovery Time from I _F = 10 mA to I _R = 1 mA, V _R = 6 V, R _L = 100 Ω,	t _{rr}	-	-	4	ns
Thermal Resistance Junction to Ambient Air	R _{thA}	-	-	0.35 ¹⁾	K/mW
Rectification Efficiency at f = 100 MHz, V _{RF} = 2 V	η _V	0.45	-	-	-

¹⁾ Valid provided that electrodes are kept at ambient temperature



Rectification Efficiency Measurement Circuit

