

SMALL SIGNAL SCHOTTKY DIODE

VOLTAGE : 40 V

FEATURES

For general purpose applications

These diodes feature very low turn-on voltage and fast switching. These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.

This diode is also available in the Mini-MELF

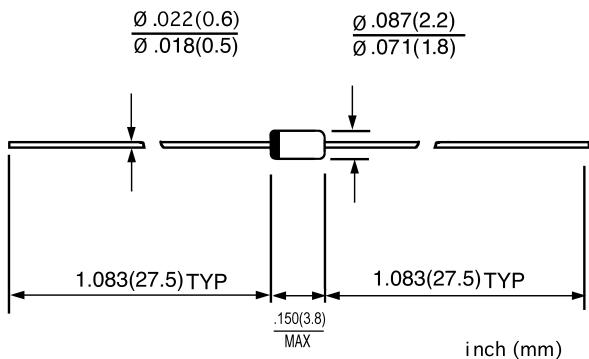
MECHANICAL DATA

Case: DO-35,glass case

Polarity: Color band denotes cathode

Weight: 0.005 ounces, 0.13 grams

DO - 35



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

MAXIMUM RATINGS

		BAT48	UNITS
Peak reverse voltage	V_R	40	V
Forward continuous current	I_F	350 ¹⁾	m A
Surge forward current at $t_p < 10$ ms	I_{FSM}	7.5 ¹⁾	A
Power dissipation	P_{tot}	330 ¹⁾	mW
Thermal resistance junction to ambient air	R_{QJA}	300 ¹⁾	/W
Junction temperature	T_j	-55 --- + 125	
Storage temperature range	T_{STG}	-55 --- + 150	

¹⁾Valid provided that leads at a distance of 4 mm from case are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS

		MIN	TYP	MAX	UNITS
Reverse breakdown voltage at $I_R=100\mu A$	$V_{(BR)R}$	40	-	-	V
Forward voltage pulse test $t_p < 300\mu s, \delta < 2\%$ @ $I_F=0.1mA$		-	-	0.25	
@ $I_F=1.0mA$		-	-	0.30	
@ $I_F=10mA$	V_F	-	-	0.40	V
@ $I_F=50mA$		-	-	0.50	
@ $I_F=200mA$		-	-	0.75	
@ $I_F=500mA$		-	-	0.90	
Leakage current pulse test $t_p < 300\mu s, \delta < 2\%$ @ $V_R=10V$		-	-	2.0	
@ $V_R=10V, T_J=60$		-	-	15	
@ $V_R=20V$	I_R	-	-	5.0	μA
@ $V_R=20V, T_J=60$		-	-	25	
@ $V_R=40V$		-	-	25	
@ $V_R=40V, T_J=60$		-	-	50	
Junction capacitance at $V_R=1V f=1MHz$	C_J	-	12	-	pF

¹⁾Valid provided that leads at a distance of 4 mm from case are kept at ambient temperature(DO-35).

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