



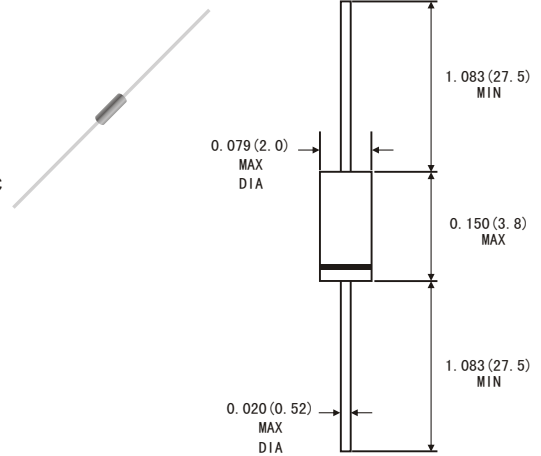
FEATURES

- For general purpose applications
- This diode features very low turn-on voltage and high breakdown voltage.
- These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.
- The diode is also available in the MinMELF case with type designation LL41.
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case: DO-35 glass case
- Polarity: color band denotes cathode end
- Weight: Approx. 0.13 gram

DO-35



Dimensions in inches and (millimeters)

ABSOLUTE RATINGS(LIMITING VALUES)

	Symbols	Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Forward Continuous Current at $T_A=25^\circ\text{C}$	I_F	100 ¹⁾	mA
Repetitive Peak Forward Current at $t_p < 1\text{s}, \delta < 0.5$ $T_A=25^\circ\text{C}$	I_{FRM}	350 ¹⁾	mA
Surge Forward Current at $t_p < 10\text{ms}$, $T_A=25^\circ\text{C}$	I_{FSM}	750 ¹⁾	mA
Power Dissipation at $T_A=65^\circ\text{C}$	P_{tot}	400 ¹⁾	mW
Junction Temperature	T_J	125	$^\circ\text{C}$
Ambient Operating Temperature Range	T_A	-65 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$

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

ELECTRICAL CHARACTERISTICS

	Symbols	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage Tested with 100 μA /300 μs Pulses	$V_{(BR)R}$	100	110		V
Forward voltage Pulse Test $t_p < 300\mu\text{s}$ at $I_F=1\text{mA}$ $I_F=200\text{mA}$	V_F		0.4	0.45	V
	V_F			1.0	V
Leakage current pulse test $t_p < 300\mu\text{s}$ at $V_R=50\text{V}, T_J=25^\circ\text{C}$ at $V_R=50\text{V}, T_J=100^\circ\text{C}$	I_R			100	nA
	I_R			20	μA
Junction Capacitance at $V_R=1\text{V}$, $f=1\text{MHz}$	C_J		2		pF
Reverse Recovery Time Form $I_F=10\text{mA}$, to $I_R=10\text{mA}$ to $I_R=1\text{mA}$ $R_L=100\Omega$	t_{rr}			5	ns
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$			300 ¹⁾	K/W

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



Figure 1. Forward current versus forward voltage at different temperatures(typical values)

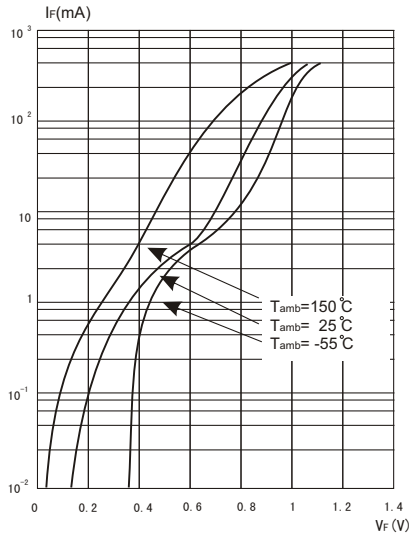


Figure 2. Reverse current versus ambient temperature

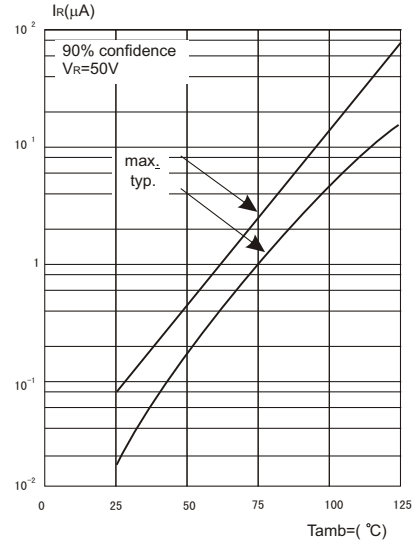


Figure 3. Reverse current versus continuous Reverse voltage(typical values)

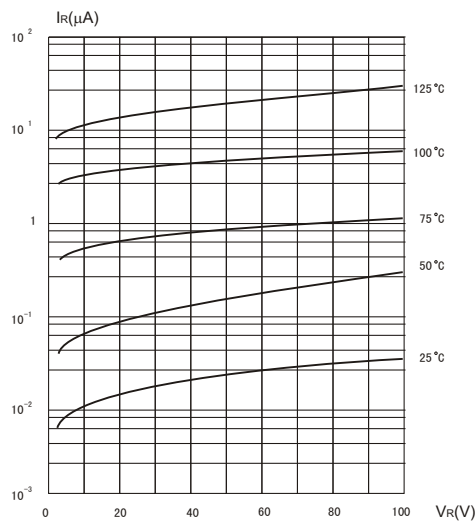




Figure 4. Capacitance C_J versus reverse applied voltage V_R (typical values)

