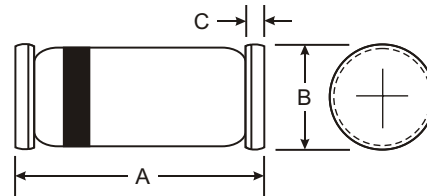


Features

- Low Forward Voltage Drop
- Fast Switching Speeds
- Guard Ring Construction for Transient Protection

Mechanical Data

- Case: MiniMELF, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Marking: Cathode Band Only
- Polarity: Cathode Band
- Weight: 0.05 grams (approx.)



MiniMELF		
Dim	Min	Max
A	3.30	3.70
B	1.30	1.60
C	0.28	0.50
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	LL42	LL43	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	30		V
Working Peak Reverse Voltage	V _{RWM}			
DC Blocking Voltage	V _R			
RMS Reverse Voltage	V _{R(RMS)}	21		V
Average Rectified Output Current	I _O	100		mA
Forward Continuous Current (Note 1)	I _{FM}	200		mA
Repetitive Peak Forward Current (Note 1) @ t < 1.0s Duty Cycle < 50%	I _{FRM}	500		mA
Non-Repetitive Peak Forward Surge Current @ t = 10ms	I _{FSM}	4.0		A
Power Dissipation (Note 1)	P _d	200		mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	500		K/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +125		°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage	V _{(BR)R}	30	—	—	V	I _{RS} = 100μA Pulses
Maximum Forward Voltage Drop (Note 2)	V _{FM}	0.26	—	1.00	V	All Types LL42 LL43 I _F = 200mA I _F = 10mA I _F = 50mA I _F = 2.0mA I _F = 15mA
Maximum Peak Reverse Current (Note 2)	I _{RM}	—	—	0.50 100	μA	V _R = 25V V _R = 25V, T _J = 100°C
Junction Capacitance	C _j	—	10	—	pF	V _R = 1.0V, f = 1.0MHz
Reverse Recovery Time	t _{rr}	—	—	5.0	ns	I _F = I _R = 10mA, I _{rr} = 0.1 x I _R , R _L = 100Ω
Rectification Efficiency	η _V	80	—	—	%	R _L = 100Ω, C _L = 300pF, f = 45MHz, V _{RF} = 2.0V

- Notes: 1. Valid provided that electrodes are kept at ambient temperature.
2. t < 300μs, Duty Cycle < 2%.