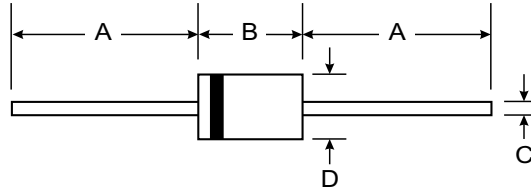




Features

- Low Forward Voltage Drop
- Fast Switching Speeds
- Guard Ring Construction for Transient Protection
- Surface Mount Versions Available (LL42 / LL43)



Mechanical Data

- Case: DO-35, Plastic
- Leads: Solderable per MIL-STD-202, Method 208
- Marking: Type Number
- Polarity: Cathode Band
- Weight: 0.13 grams (approx.)

DO-35		
Dim	Min	Max
A	25.40	□
B	□	4.00
C	□	0.60
D	□	2.00
All Dimensions in mm		

Maximum Ratings @ T_A = 25 °C unless otherwise specified

Characteristic	Symbol	BAT42	BAT43	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
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} = 100 □A Pulses
Maximum Forward Voltage Drop (Note 2)	V _{FM}	□	□	1.00	V	I _F = 200mA I _F = 10mA I _F = 50mA I _F = 2.0mA I _F = 15mA
		□	□	0.40		
		□	□	0.65		
		0.26		0.33		
		□		0.45		
Maximum Peak Reverse Current (Note 2)	I _{RM}	□	□	0.50	□A	V _R = 25V V _R = 25V, T _j = 100°C
				100		
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 _{TR} = 0.1 x I _R , R _L = 100 □
Rectification Efficiency	□v	80	□	□	%	R _L = 100 □, C _L = 300pF, f = 45MHz, V _{RF} = 2.0V

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