

VOLTAGE RANGE: 40 - 60V
CURRENT: 150mA

Features

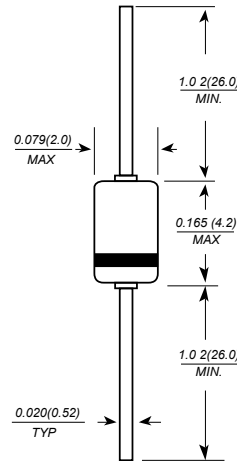
- Integrated protection ring against static discharge
- Low capacitance
- Low leakage current
- Low forward voltage drop
- Very low switching time

Mechanical Data

- Case: DO-35, glass case
- Polarity: Color band denotes cathode
- Weight: 0.004 ounces, 0.13 grams



DO-35(GLASS)



Dimensions in millimeters

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	Value	Unit
Continuous Reverse Voltage	BAT81	40	V
	BAT82	50	
	BAT83	60	
Forward Continuous Current	I _F	30 ⁽¹⁾	mA
Repetitive Peak Forward Current at tp ≤ 1s	I _{FRM}	150 ⁽¹⁾	mA
Non-repetitive Peak Forward Surge Current at tp ≤ 10ms	I _{FSM}	500 ⁽¹⁾	mA
Power Dissipation (Infinite Heatsink)	P _D	200 ⁽¹⁾	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	430 ⁽¹⁾	°C/W
Junction Temperature	T _J	125	°C
Storage temperature range	T _S	-65 to + 150	°C

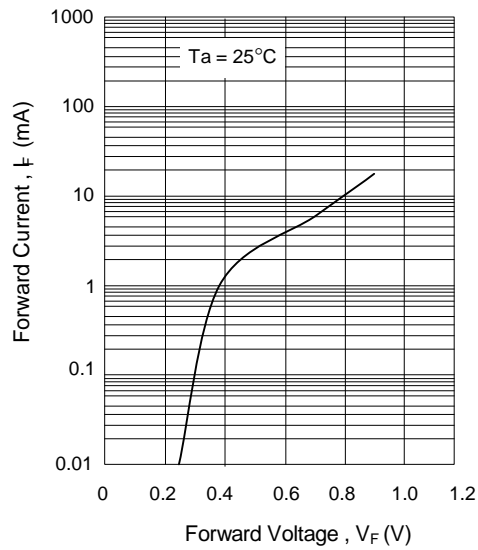
Note: (1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature.

Electrical Characteristics (T_J = 25°C unless otherwise noted)

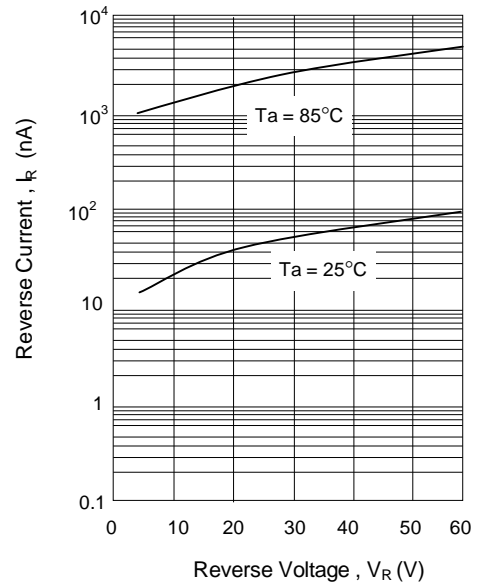
Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Current	I _R	V _R = V _{Rmax}	-	-	200	nA
Forward Voltage	V _F	I _F = 1mA	-	-	0.41	V
		I _F = 15mA	-	-	1.0	
Diode Capacitance	C _d	V _R = 1V, f = 1MHz	-	-	1.6	pF

RATING AND CHARACTERISTIC CURVES (BAT81 - BAT83)

Typical forward characteristics



Typical reverse characteristics



Typical diode capacitance as a function of reverse voltage

