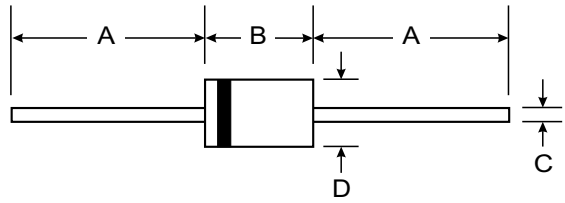
BAT81-BAT83

30mA Axial Leaded Schottky Barrier Diodes

Features

- Low forward voltage
- High breakdown voltage
- Guard ring protected
- Hermetically-sealed leaded glass package
- Low diode capacitance.
- Pb / RoHS Free



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

Mechanical Data

- **Case:** DO-34 Glass Case
- **Weight:** approx. 0.11g

Maximum Ratings and Electrical Characteristics

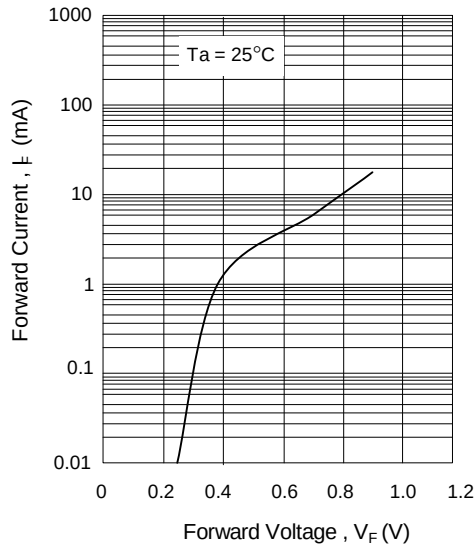
@ T_A = 25°C unless otherwise specified

Parameter		Symbol	Value	Unit
Continuous Reverse Voltage	BAT81 BAT82 BAT83	V_R	40 50 60	V
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		$R_{\theta JA}$	430(1)	°C/W
Junction Temperature		T_J	125	°C
Storage temperature range		T_S	-65 to + 150	°C

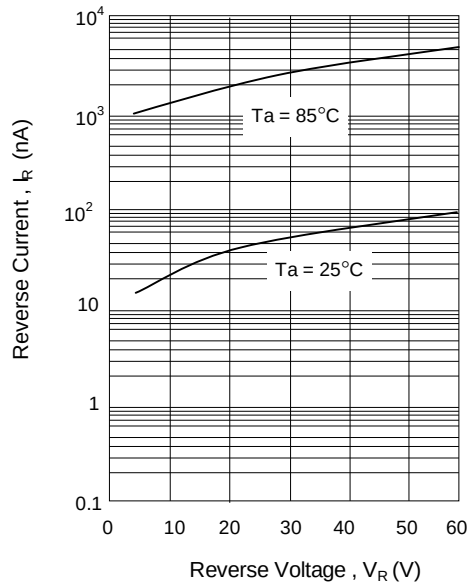
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Current	I_R	$V_R = V_{Rmax}$	-	-	200	nA
Forward Voltage	V_F	I_F = 1mA I_F = 15mA	- -	- -	0.41 1.0	V
Diode Capacitance	Cd	V_R = 1V, f = 1MHz	-	-	1.6	pF

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

Typical forward characteristics



Typical reverse characteristics



Typical diode capacitance as a function of reverse voltage