

BAT81 - BAT83

FEATURES :

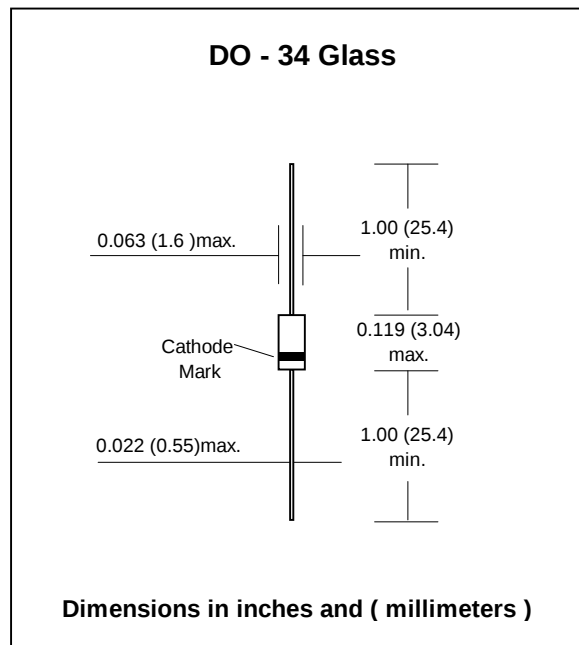
- Low forward voltage
- High breakdown voltage
- Guard ring protected
- Hermetically-sealed leaded glass package
- Low diode capacitance.
- Pb / RoHS Free

MECHANICAL DATA :

Case: DO-34 Glass Case

Weight: approx. 0.11g

SCHOTTKY BARRIER DIODES



Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	40	V
		50	
		60	
Forward Continuous Current	I_F	30 ⁽¹⁾	mA
Repetitive Peak Forward Current at $t_p \leq 1s$	I_{FRM}	150 ⁽¹⁾	mA
Non-repetitive Peak Forward Surge Current at $t_p \leq 10ms$	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

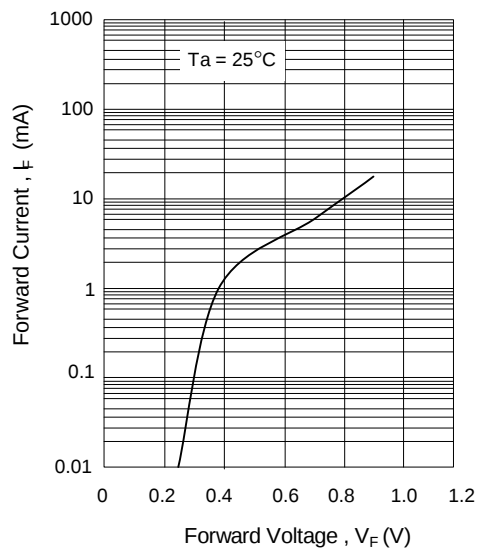
Note: (1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature.

Electrical Characteristics ($T_J = 25^\circ\text{C}$ unless otherwise noted)

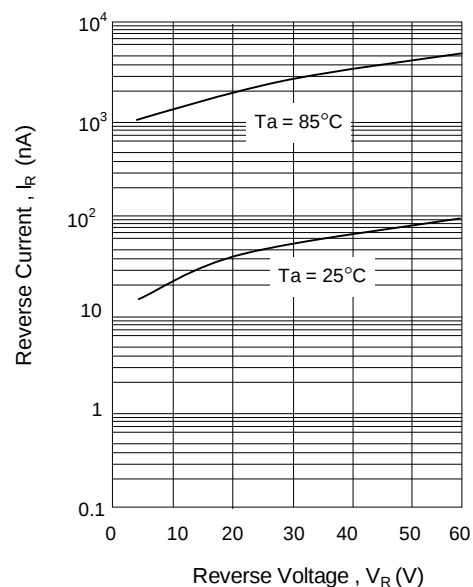
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Current	I_R	$V_R = V_{Rmax}$	-	-	200	nA
Forward Voltage	V_F	$I_F = 1mA$	-	-	0.41	V
		$I_F = 15mA$	-	-	1.0	
Diode Capacitance	C_d	$V_R = 1V, f = 1MHz$	-	-	1.6	pF

RATING AND CHARACTERISTIC CURVES (BAT81 - BAT83)

Typical forward characteristics



Typical reverse characteristics



Typical diode capacitance as a function of reverse voltage

