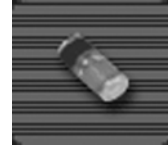


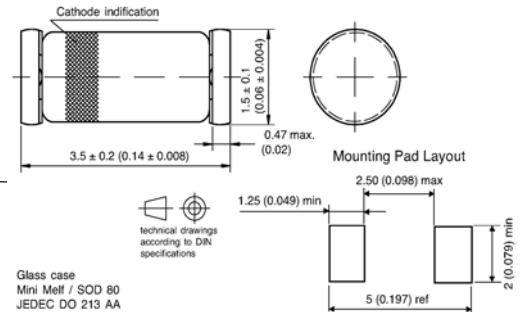
Features

- ◆ For general purpose applications.
- ◆ This diode features low turn-on voltage and high break-down voltage.
- ◆ This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.
- ◆ This diode is also available in the DO-35 case with type designation BAT48.



Mechanical Data

- ◆ Case: MiniMELF Glass Case (SOD-80)
- ◆ Weight: approx. 0.05g
- ◆ Cathode Band Color: Green



Maximum Ratings and Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	40	Volts
Forward continuous current at $T_{amb}=25^{\circ}C$	I_F	350 ⁽¹⁾	mA
Repetitive peak forward current at $t_f < 1s$, $\delta < 0.5$, $T_{amb}=25^{\circ}C$	I_{FRM}	1.0 ⁽¹⁾	Amp
Surge forward current at $t_f < 10ms$, $T_{amb}=25^{\circ}C$	I_{FSM}	7.5 ⁽¹⁾	Amps
Power dissipation ⁽¹⁾ at $T_{amb}=80^{\circ}C$	P_{tot}	330 ⁽¹⁾	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	300 ⁽¹⁾	$^{\circ}C/W$
Junction temperature	T_j	125	$^{\circ}C$
Ambient operating temperature range	T_{amb}	-65 to +125	$^{\circ}C$
Storage temperature range	T_s	-65 to +150	$^{\circ}C$

Notes: 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.)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	V _{(BR)R}	100uA Pulses	40	-	-	Volts
Leakage current pulse test t _p <300us, δ<2%	I _R	V _R =10V V _R =10V, T=60°C V _R =20V V _R =20V, T=60°C V _R =40V V _R =40V, T=60°C	- - - - - -	- - - - - -	2 15 5 25 25 50	uA
Forward voltage pulse test t _p <300us, δ<2%	V _F	I _F =0.1mA I _F =1.0mA I _F =10mA I _F =50mA I _F =200mA I _F =500mA	- - - - - -	- - - - - -	0.25 0.30 0.40 0.50 0.75 0.90	Volt
Capacitance	C _{bst}	V _R =1V, f=1MHz	-	12	-	pF

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