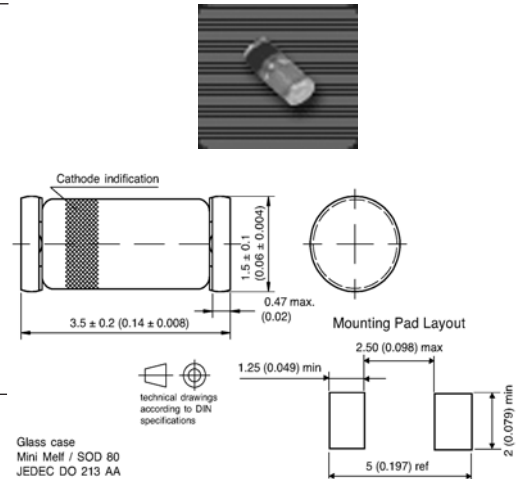


Features

- ◆ For general purpose applications.
- ◆ This diode features low turn-on voltage. This device are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges
- ◆ Metal-on-silicon Schottky barrier device which is protected by a PN junction guard ring.
- ◆ The low forward voltage drop and fast switching make it ideal for protection of MOS devices, steering, biasing and coupling diodes for fast switching and low logic level applications.
- ◆ This diode is also available in the DO-35 case with type designation BAT86.

Mechanical Data

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



Maximum Ratings and Thermal Characteristics

(T_A=25°C unless otherwise noted.)

Parameter	Symbol	Value	Unit
Continuous reverse voltage	V _R	50	Volts
Forward continuous current at T _{amb} =25°C	I _F	200 ⁽¹⁾	mA
Repetitive peak forward current at tp<1s, v<0.5, T _{amb} =25°C	I _{FRM}	500 ⁽¹⁾	mA
Power dissipation at T _{amb} =25°C	P _{tot}	200 ⁽¹⁾	mW
Thermal resistance junction to ambient air	R _{θJA}	300 ⁽¹⁾	°C/W
Junction temperature	T _J	125	°C
Ambient operating temperature range	T _{amb}	-65 to +125	°C
Storage temperature range	T _S	-65 to +150	°C

Notes: 1. Valid provided that electrodes 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}	I _R =10uA (pulsed)	50	-	-	Volts
Leakage current	I _R	V _R =25V	-	0.2	0.5	uA
Forward voltage	V _F	Pulse Test tp<300us, δ<2% I _F =0.1mA I _F =1mA I _F =10mA I _F =30mA I _F =100mA	- - - - -	0.200 0.275 0.365 0.460 0.700	0.300 0.380 0.450 0.600 0.900	Volt
Capacitance	C _{tot}	V _R =1V, f=1MHz	-	-	8	pF
Reverse recovery time	t _{rr}	I _F =10mA, I _R =10mA, I _F =1mA	-	-	5	ns