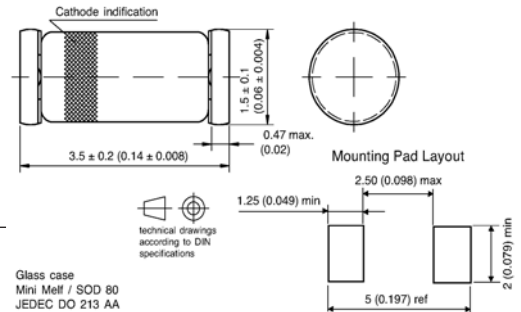
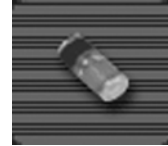


Features

- ◆ 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, uc<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

($T_j=25^\circ\text{C}$ unless otherwise noted.)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=10\mu\text{A}$ (pulsed)	50	-	-	Volts
Leakage current	I_R	$V_R=25\text{V}$	-	0.2	0.5	μA
Forward voltage	V_F	Pulse Test $t_p < 300\mu\text{s}$, $\delta < 2\%$ $I_F=0.1\text{mA}$ $I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=30\text{mA}$ $I_F=100\text{mA}$	- - - - -	0.200 0.275 0.365 0.460 0.700	0.300 0.380 0.450 0.600 0.900	Volt
Capacitance	C_{tot}	$V_R=1\text{V}$, $f=1\text{MHz}$	-	-	8	pF
Reverse recovery time	t_{rr}	$I_F=10\text{mA}$, $I_R=10\text{mA}$, $I_F=1\text{mA}$	-	-	5	ns