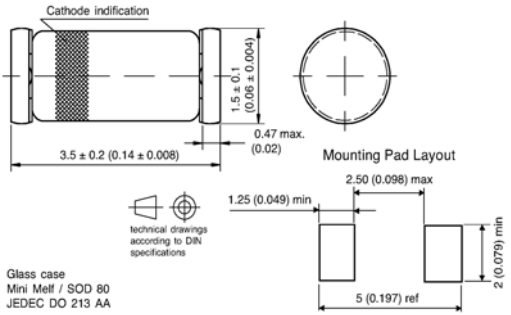
BAS86

Small-Signal Diode
Schottky Diode

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, υ≤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	$R_{\theta JA}$	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_R=1mA	-	-	5	ns