BAT86

Small Signal Schottky Diodes

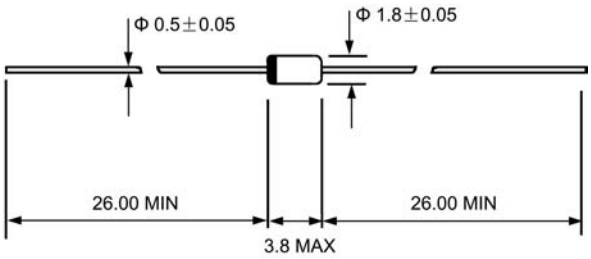
VOLTAGE RANGE: 50 V

CURRENT: 0.2 A

Features

- ◇ For general purpose applications
- ◇ This diodes features very low turn-on voltage and fast switching. This devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges
- ◇ Metal 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

DO - 35(GLASS)



Dimensions in millimeters

Mechanical Data

- ◇ Case:JEDEC DO--35,glass case
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: Approx. 0.13 gram

ABSOLUTE RATINGS

	Symbols	Value	UNITS
Continuous reverse voltage	V_R	50.0	V
Forw ard continuous current @ T_A=25℃	I_F	200[1)]	mA
Repetitive peak forw ard current @ tp<1s, δ <=0.5,T_A=25℃	I_{FRM}	500[1)]	mA
Pow er dissipation @ T_A=25 ℃	P_{tot}	200[1)]	mw
Junction temperature	T_J	125	℃
Ambient operating temperature range	T_A	-55 ---+ 125	℃
Storage temperature range	T_{STG}	-55 ---+ 150	℃

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

ELECTRICAL CHARACTERISTICS

	Symbols	Min.	Typ.	Max.	UNITS
Reverse breakdow n voltage tested w ith 100 μ A pulses	V_R	50.0			V
Forw ard voltage Pulse test tp<300 μ s, δ <2% @ I_F=0.1mA @ I_F=1mA @ I_F=10mA @ I_F=30mA @ I_F=100mA	V_F		 0.2 0.275 0.365 0.46 0.7	 0.3 0.38 0.45 0.6 0.9	 V V V V V
Leakage current V_R=40V	I_R			5.0	μ A
Junction capacitance at V_R=1V,f=1MHz	C_J			8	pF
Reverse recovery time form I_F=10mA to I_R=10mA to I_R=1mA	t_{rr}			5	ns
Thermal resistance junction to ambient air	$R_{\theta JA}$			300[1)]	℃/W

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