BAT86

Small Signal Schottky Diodes

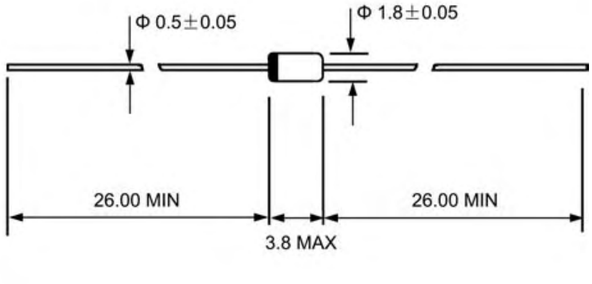
Reverse Voltage： 50Volts

Forward Current:0.2Amps

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
Forward continuous current @ T_A=25℃	I_F	$200^{1)}$	mA
Repetitive peak forward current @ tp<1s, δ <=0.5,T_A=25℃	I_{FRM}	$500^{1)}$	mA
Non-Repetitive peak forward current(at tp≤10ms)	I_{FSM}	5	A
Power 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 breakdown voltage tested with 100μA pulses	V_R	50.0			V
Forward voltage Pulse test tp<300μs, 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	μA
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

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
DO-35	5000/AMMO	100000	41X28.5X38	14.57	13.07