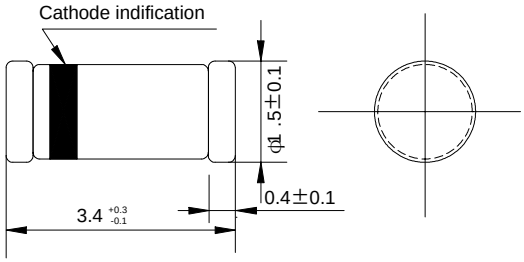
BAS86

Small Signal Schottky Diode

VOLTAGE RANGE: 50 V
CURRENT: 0.2 A
Mini-melf

Features

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



Dimensions in millimeters

Mechanical Data

- ◇ Case:JEDEC mini-melf,glass case
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: Approx.0.031 grams

ABSOLUTE RATINGS

	Symbols	Value	UNITS
Continuous reverse voltage	V_R	50	V
Forward continuous current @ T_A=25℃	I_F	200 [1)]	mA
Peak forward current @ T_A=25 ℃	I_{FM}	500 [1)]	mA
Surge forward current @ t_p<1s,T_A=25 ℃	I_{FSM}	5 [1)]	A
Power dissipation @ T_A=65 ℃	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	V_R	50.0			V
Forward 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			 0.30 0.38 0.45 0.60 0.90	 V V V V V
Leakage current V_R=40V	I_R			5.0	μ A
Diode capacitance at V_R=1V,f=1MHz	C_d			8	pF
Reverse recovery time @ I_F=10mA,I_R=10mA,I_R=1mA	t_{rr}			5	ns
Thermal resistance junction to ambient	$R_{\theta JA}$			430 [1)]	℃/W

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

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Ratings AND Charactieristic Curves

FIG.1-- ADMISSIBLEPOWERDISSIPATIONVS. AMBIENT TEMPERATURE

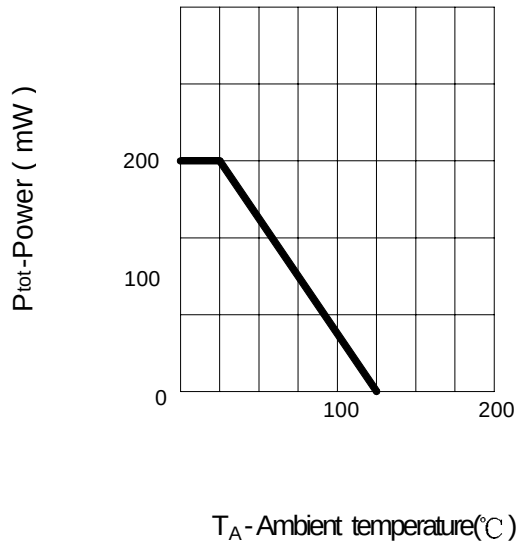

FIG. 2–TYPICAL INSTANTANEOUS FORWORD CHARACTERISTICS

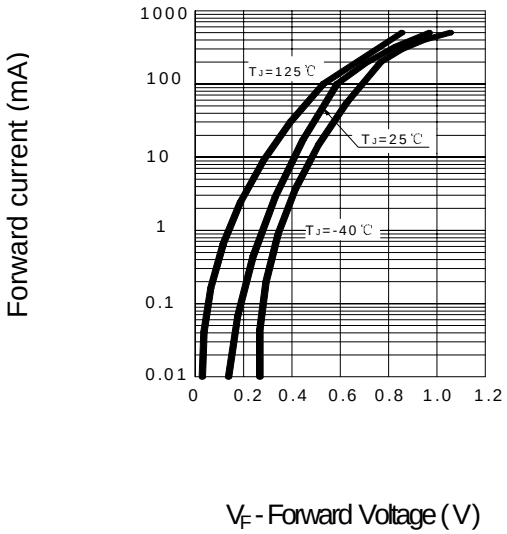

FIG. 3 – TYPICAL REVERSE CHARACTERISTICS

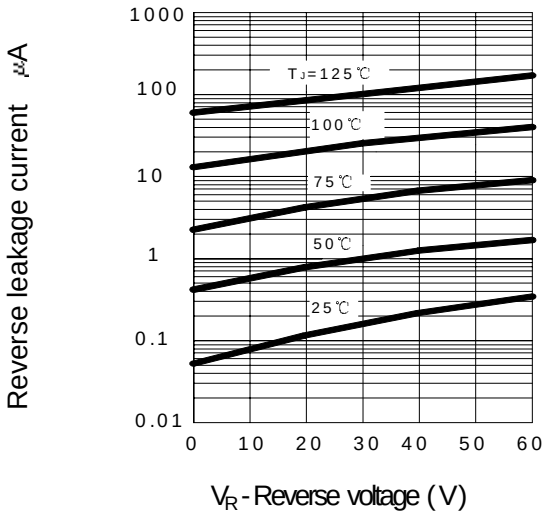

FIG.4 -- TYPICAL JUNCTION CAPACITANCE