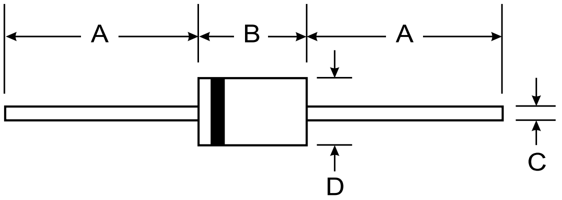
BAT85

0.2A Axial Leaded Small Signal Schottky Diodes

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



DO-35		
Dim	**Min**	**Max**
A	25.40	—
B	—	4.00
C	—	0.60
D	—	2.00
All Dimensions in mm		

Mechanical Data

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

Maximum Ratings and Electrical Characteristics

@ T_A = 25°C unless otherwise specified

	Symbols	Value	UNITS
Continuous reverse voltage	V_R	30.0	V
Forward continuous current @ T_A=25℃	I_F	200 1)	mA
Peak forward current @ T_A=25℃	I_{FM}	300 1)	mA
Surge forward current @ t_p<1s,T_A=25℃	I_{FSM}	600 1)	mA
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	℃

	Symbols	Min.	Typ.	Max.	UNITS
Reverse breakdown voltage	V_R	30.0			V
Forward voltage Pulse test tp<300 μs, δ <2%	V_F				
@ I_F=0.1mA				0.24	V
@ I_F=1mA				0.32	V
@ I_F=10mA				0.4	V
@ I_F=30mA			0.5		V
@ I_F=100mA				0.8	V
Leakage current V_R=25V	I_R			2.0	μA
Junction capacitance at V_R=1V,f=1MHz	C_J			10	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

FIG.1-- ADMISSIBLEPOWERDISSIPATIONVS. AMBIENT TEMPERATURE

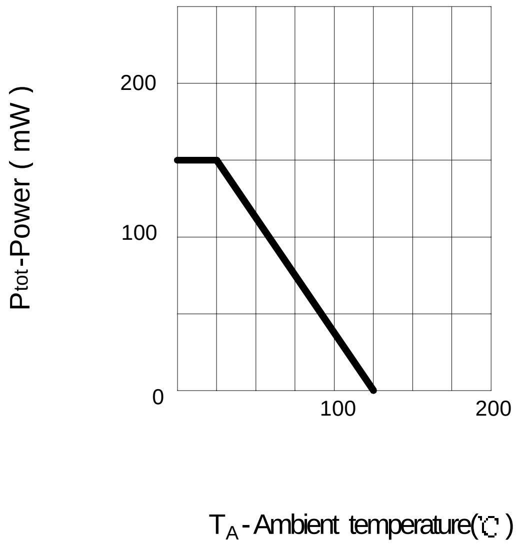


FIG. 2–TYPICAL INSTANTANEOUS FORWORD CHARACTERISTICS

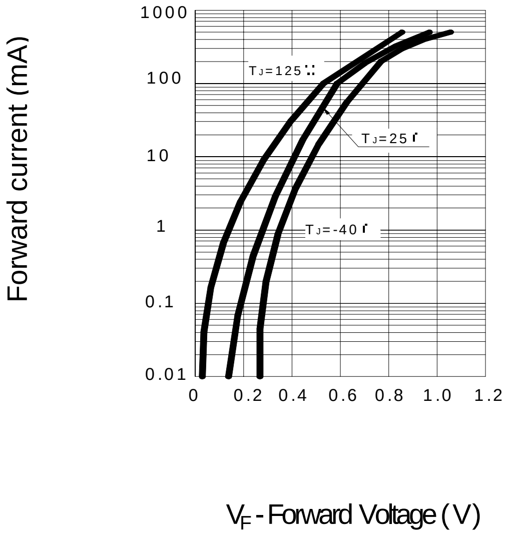


FIG. 3 – TYPICAL REVERSE CHARACTERISTICS

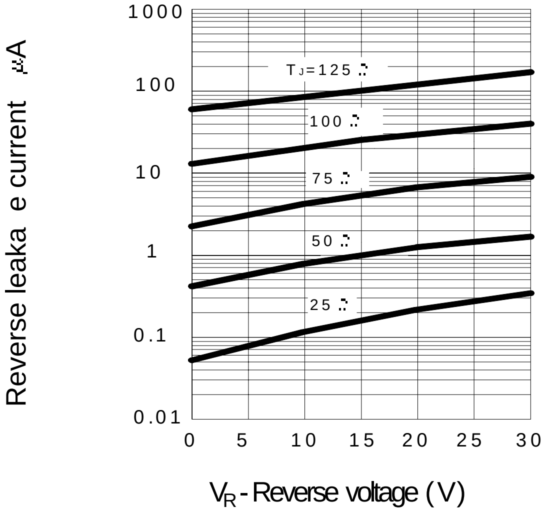


FIG.4 – TYPICAL JUNCTION CAPACITANCE