BAT85

Schottky Barrier Diode

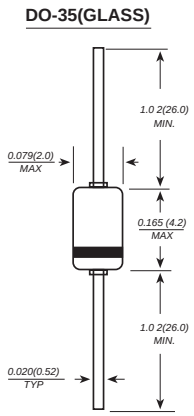
VOLTAGE RANGE: 30V PEAK PULSE POWER:200mW

Features

- V_R 30V
- I_{FM} 300mA
- Applications where a very low forward voltage is required

MECHANICAL DATA

- Case: DO-35
- Polarity: Color band denotes cathode end
- Mounting Position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified

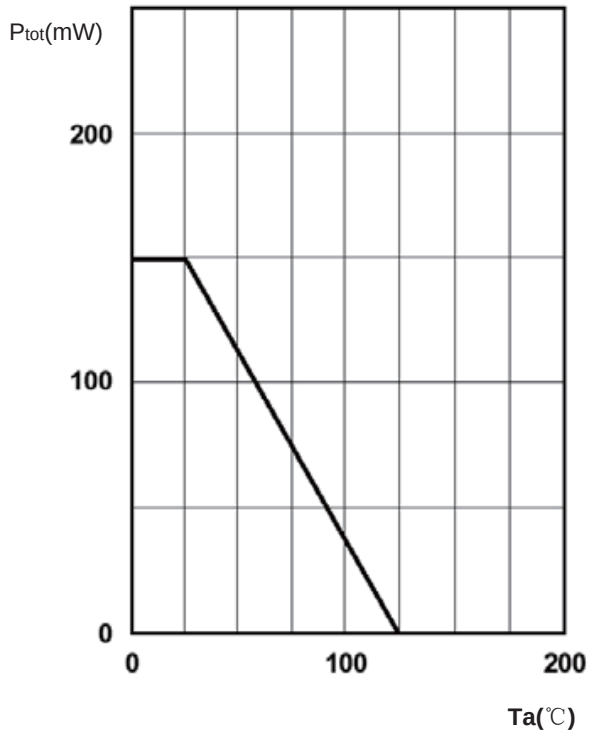
Item	Symbol	Unit	Conditions	Max
Continuous reverse voltage	V_R	V		30
Forward continuous current	I_F	mA	Ta=25℃	200
Peak forward current	I_{FM}	mA	Ta=25℃	300
Surge forward current	I_{FSM}	mA	$t_p \leqslant 1s$, Ta=25℃	600
Power dissipation	P_{tot}	mW	Ta=65℃	200
Maximum junction temperature	T_j	℃		125
Ambient operating temperature range	T_A			-65 to +125
Storage temperature range	T_{stg}	℃		-65 to +150
Junction ambient	R_{thJA}	℃/W	On PC board 50mm×50mm×1.6mm	250

Electrical Specification (T_A=25°C unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	Max
Reverse breakdown voltage	$V_{(BR)R}$	V	I_R=10uA (pulsed)	30	
Leakage current	I_R	uA	V_R=25V		2
Forward voltage pulse test tp<300us,s<2%	VF	V	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
Capacitance	C_{tot}	pF	V_R=1V, f =1MH$_Z$		10
Reverse recovery time	t_{rr}	ns	I_F= I_R=10mA ,I_R=0.1mA		5

RATINGS AND CHARACTERISTIC CURVES

Fig1. Admissible power dissipation vs.ambient temperature



characteristics

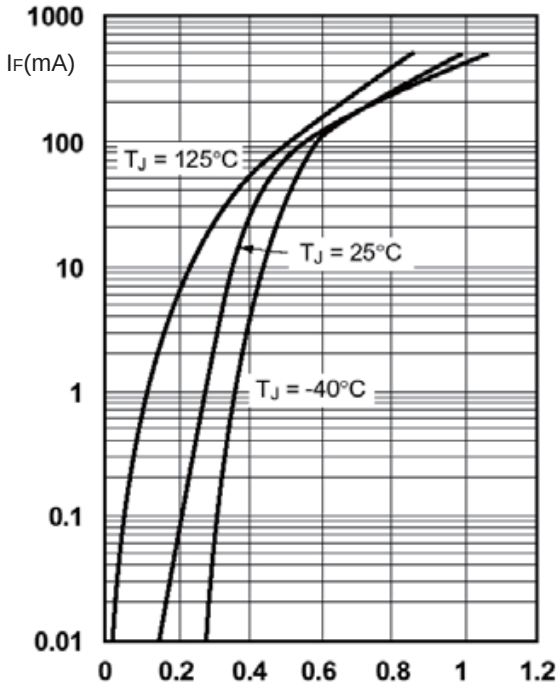


Fig3. Typical reverse characteristics

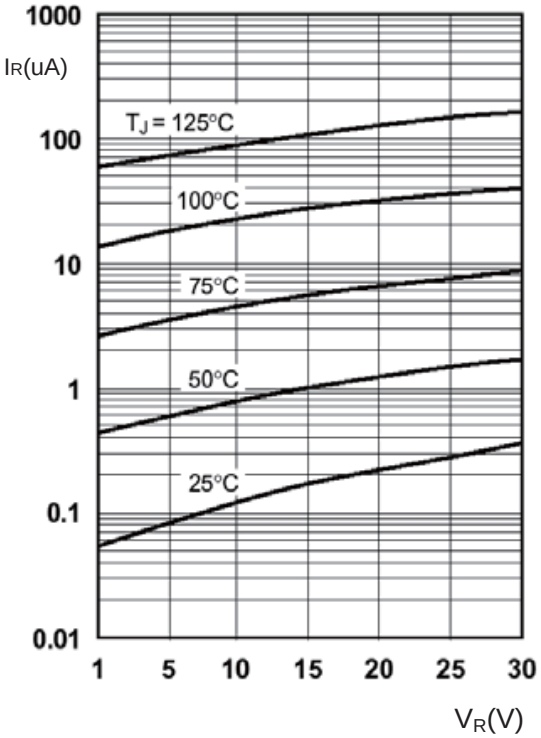


Fig4. Typical junction capacitance