



Sckottky Barrier Diodes

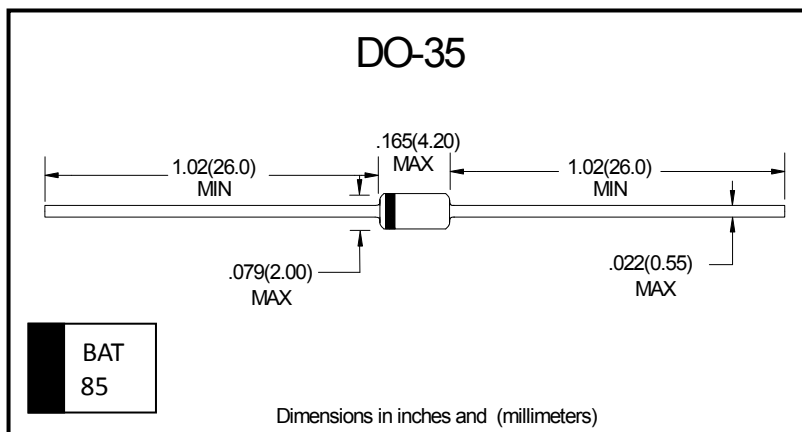
■ Features

- V_R 30V
- I_{FM} 300mA

■ Applications

- Applications where a very low forward voltage is required

■ Outline Dimensions and Mark



■ Limiting Values (Absolute Maximum Rating)

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

■ Electrical Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	Max
Reverse breakdown voltage	$V_{(BR)R}$	V	$I_R=10\mu\text{A}$ (pulsed)	30	
Leakage current	I_R	μA	$V_R=25\text{V}$		2
Forward voltage pulse test $t_p < 300\mu\text{s}, s < 2\%$	V_F	V	$I_F=0.1\text{mA}$		0.24
		V	$I_F=1\text{mA}$		0.32
		V	$I_F=10\text{mA}$		0.4
		V	$I_F=30\text{mA}$		0.5
		V	$I_F=100\text{mA}$		0.8
Capacitance	C_{tot}	pF	$V_R=1\text{V}, f=1\text{MHz}$		10
Reverse recovery time	t_{rr}	ns	$I_F=I_R=10\text{mA}, I_R=0.1\text{mA}$		5

■ Characteristics(Typical)

Fig1. Admissible power dissipation vs.ambient temperature

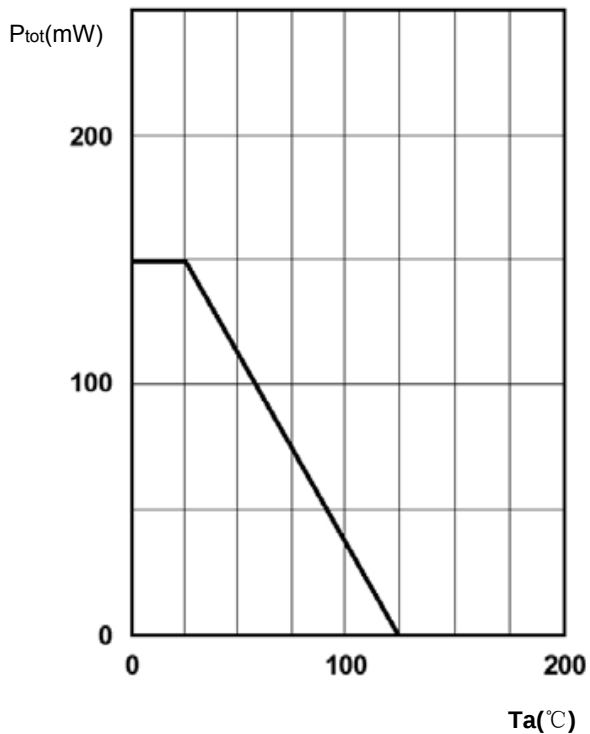


Fig2. Typical instantaneous forward characteristics

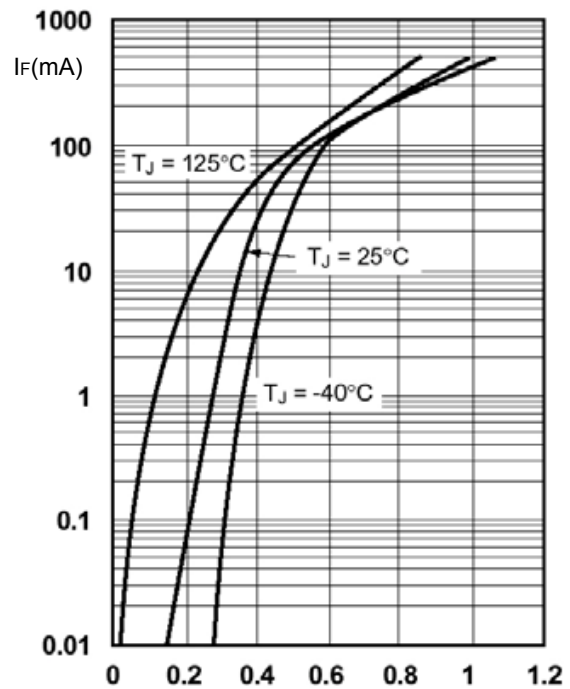


Fig3. Typical reverse characteristics

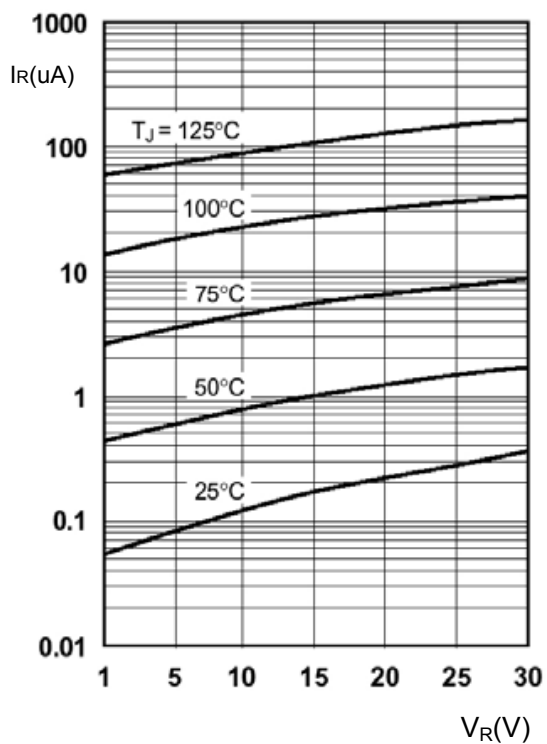


Fig4. Typical junction capacitance

