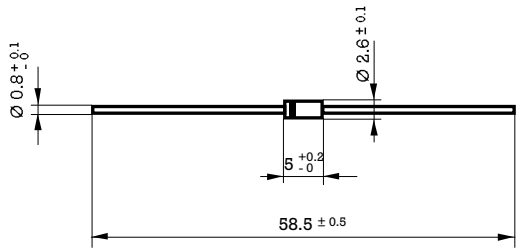
1 Amp. Schottky Barrier Rectifier

Dimensions in mm.

DO-41
(Plastic)



Mounting instructions

1. Min. distance from body to soldering point, 4 mm.
2. Max. solder temperature, 350 °C.
3. Max. soldering time, 3.5 sec.
4. Do not bend lead at a point closer than 2 mm. to the body.

Voltage	Current
20 V to 40 V	1.0 A at 90 °C.

- **Metal Silicon Junction, majority carrier conduction**
- High current capability, low forward voltage drop
- Guardring for overvoltage protection
- Low power loss, high efficiency
- High surge capability
- Plastic material carries U/L recognition 94V-O
- Terminals: Axial Leads
- Polarity: Colour band denotes cathode

Maximum Ratings, according to IEC publication No. 134

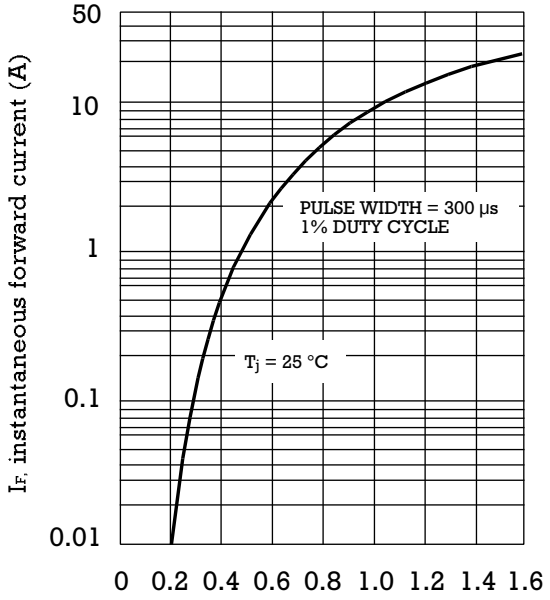
		1N5817	1N5818	1N5819
V_{RRM}	Peak recurrent reverse voltage (V)	20	30	40
V_{RMS}	Maximum RMS voltage (V)	14	21	28
V_{DC}	Maximum DC blocking voltage (V)	20	30	40
V_{RSM}	Maximum non-repetitive peak reverse voltage (V)	24	36	48
$I_{F(AV)}$	Maximum average Forward current. 9.5 mm lead length at T_L = 90 °C	1 A		
I_{FSM}	8.3 ms. peak forward surge current (Jedec Method)	25 A		
C_j	Typical junction capacitance at 1 MHz and -4V_{DC}	110 pF		
T_j	Operating temperature range	– 65 to + 125 °C		
T_{stg}	Storage temperature range	– 65 to + 125 °C		

Electrical Characteristics at Tamb = 25 °C

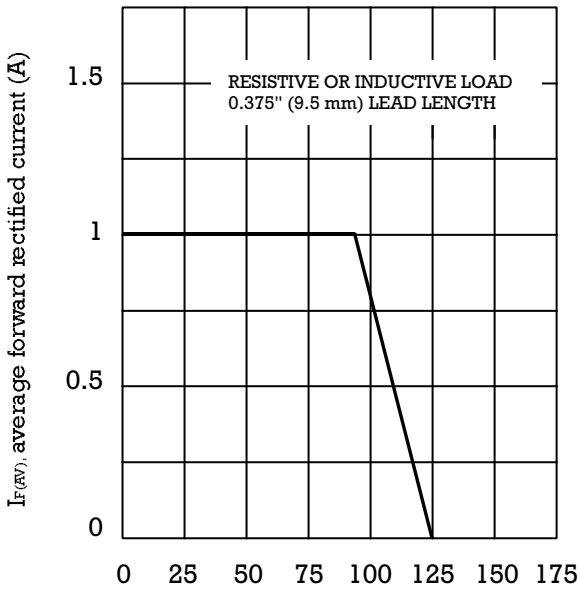
V_F	Max. forward voltage drop at I_F = 1.0 A		0.55 V	0.60 V
I_R	Max. Instantaneous reverse current at V_{RRM}	Ta = 25 °C Ta = 100 °C	1 mA 10 mA	
R_{thj-a} R_{thj-l}	Typical Thermal Resistance		50 °C/W 15 °C/W	

NOTE: Thermal Resistance from junction to lead or to ambient PCB mounted with 9.5 mm lead length with 38x38 mm copper pads.

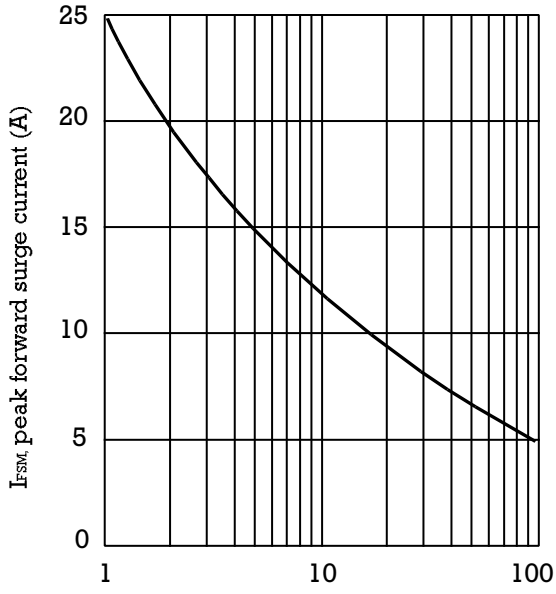
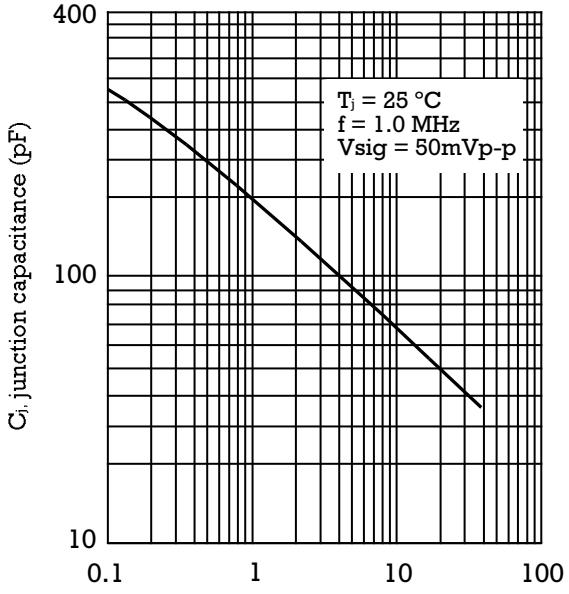
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE
PEAK FORWARD SURGE CURRENT



TYPICAL JUNCTION CAPACITANCE