

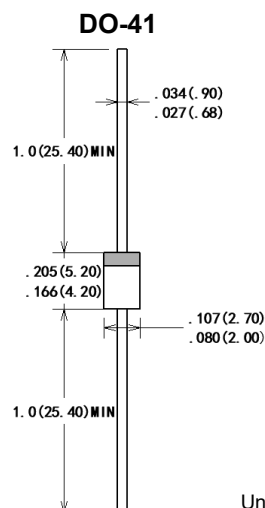
Axial Lead Schottky Barrier Diode

Features

- Low reverse leakage
- High forward surge capability
- High reliability
- High temperature soldering guaranteed:
260°C/10 seconds, 9.5mm lead length
- Lead and body according with RoHS standard
- Green compound with suffix "-F" on Marking

Mechanical Data

- Case: DO-41 Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free



Maximum Ratings & Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	1N5817	1N5818	1N5819	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	V
Maximum RMS voltage	V _{RMS}	14	21	28	V
Maximum DC blocking voltage	V _{DC}	20	30	40	V
Maximum average forward rectified current	I _{F(AV)}	1.0			A
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	I _{FSM}	30			A
Maximum forward voltage @I _F =1.0A	V _F	0.45	0.55		V
Maximum reverse current @V _{DC} TA= 25°C TA= 100°C	I _R	0.5 20			mA
Typical thermal resistance (Note 1)	R _{θJA}	50			°C/W
Type junction capacitance V _R =4.0V,f=1MHz	C _J	60			pF
Operating junction temperature rang	T _J	-55 ~ +125			°C
Storage temperature rang	T _{STG}	-55 ~ +150			°C

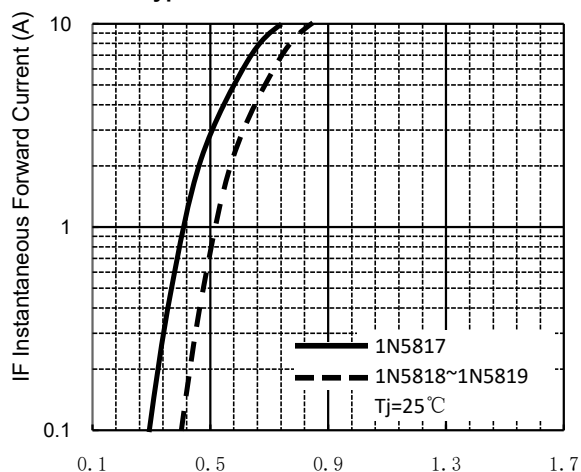
Note:

1) Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted.



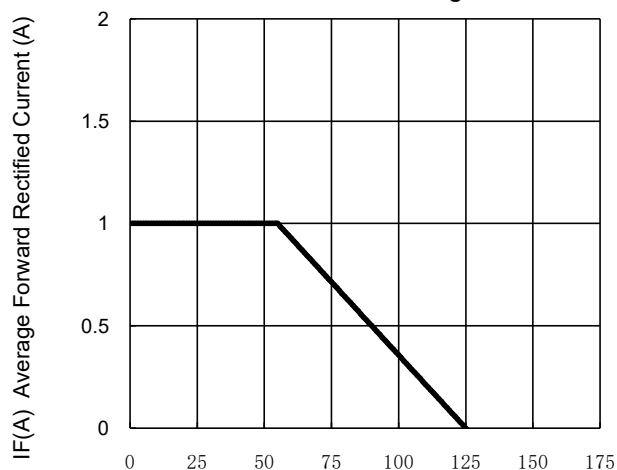
Characteristic Curves

Typical Forward Characteristic



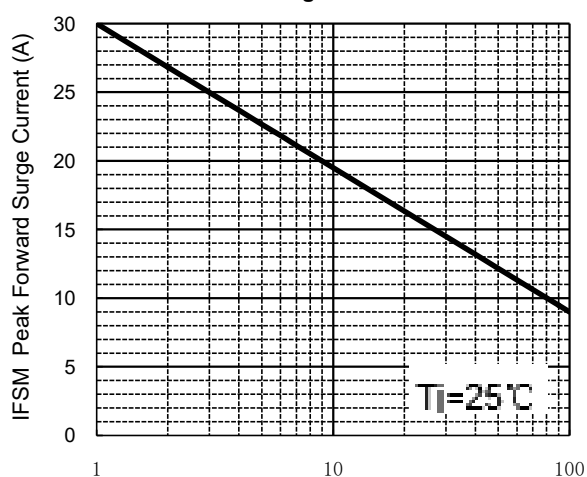
V_F Instantaneous Forward Voltage (V)

Forward Current Derating Curve



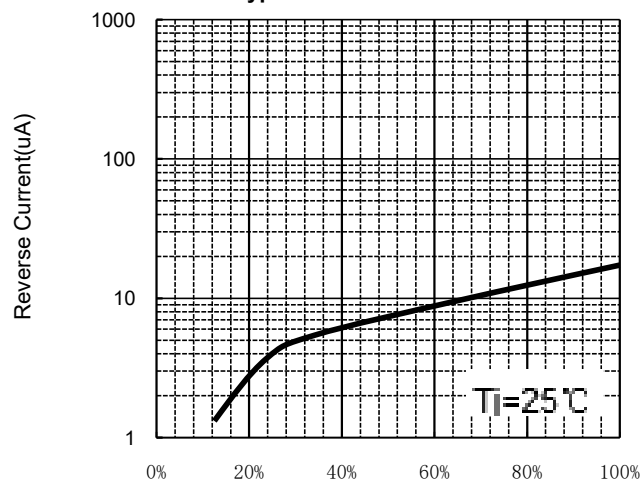
T_{amb} , ambient temperature ($^\circ\text{C}$)

Maximum Non Repetitive Peak
Forward Surge Current



Number of Cycles at 60 Hz.

Typical Reverse Characteristics



Percent Of Rated Peak Reverse voltage %