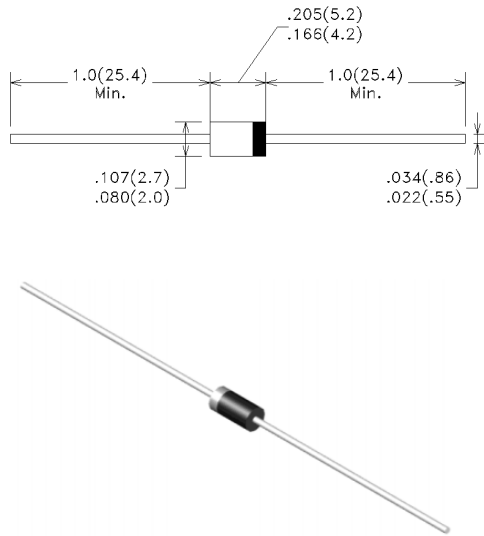


Package Outline Dimensions in mm (inches)
DO-41



Reverse Voltage - 40 V

Forward Current - 1.0 A

Features

- Metal-Semiconductor junction with guarding
- Very low forward voltage drop
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC

Typical Applications

- For use in low voltage, high frequency inverters.

Mechanical Data

- Case:DO-41 Plastic Package
- Polarity:Color band denotes cathode end

Maximum ratings

Ratings at TA=25°C (unless otherwise specified)

Parameter	Symbol	1N5819	Unit
Maximum recurrent peak reverse voltage	VRRM	40	V
Maximum RMS voltage	VRMS	28	V
Maximum DC blocking voltage	VDC	40	V
Maximum average forward rectified current	IF(AV)	1.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	30	A
Storage temperature range	TS	-55 ~ 150	°C
Operating Junction temperature range	Tj	-55 ~ 125	°C
Thermal Resistance	RthJA	50	°C /W

Electrical characteristics

Ratings at TA=25°C (unless otherwise specified)

Parameter	Test Conditions	Symbol	1N5819	Unit
Maximum forward voltage	IF=1.0 A	VF	0.55	V
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	IR	0.2	mA
	TA=100°C		20	

Fig.1 Forward Current Derating Curve

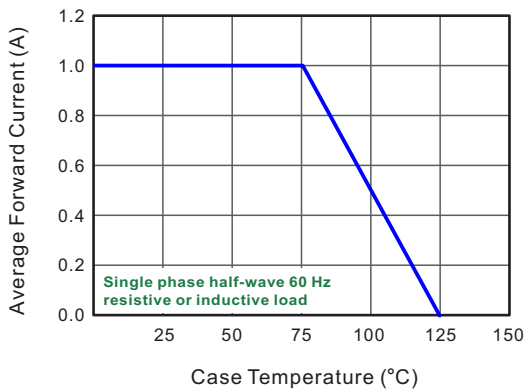


Fig.2 Typical Reverse Characteristics

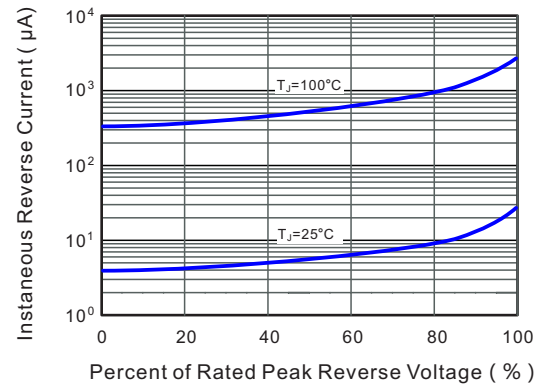


Fig.3 Typical Forward Characteristic

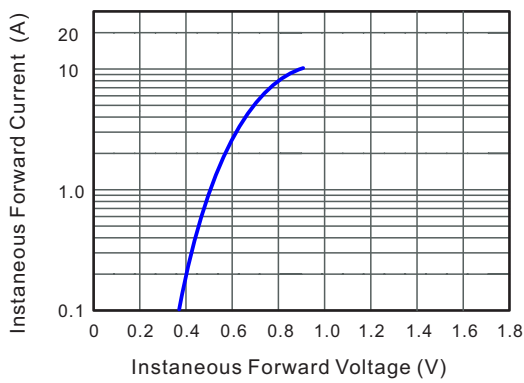


Fig.4 Typical Junction Capacitance

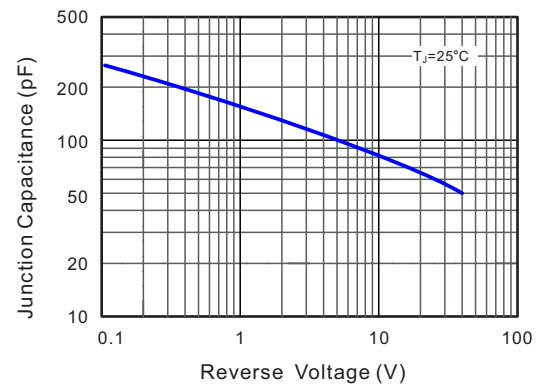


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

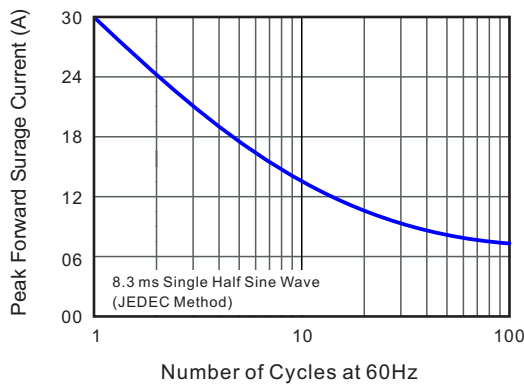


Fig.6- Typical Transient Thermal Impedance

