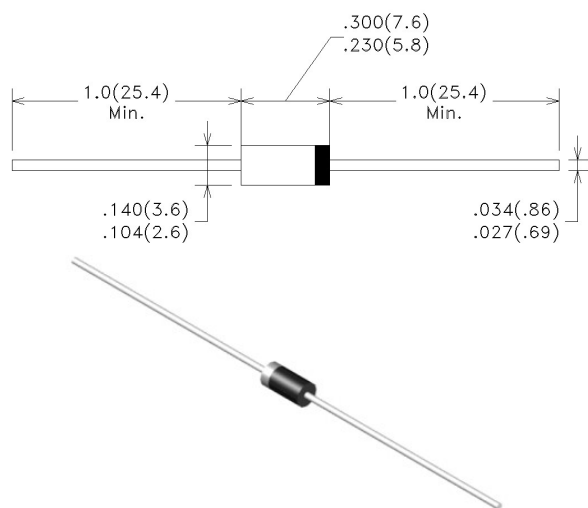


Axial General Purpose Rectifier

Package Outline Dimensions in mm (inches)

DO-15



Features

- High recovery voltage
- Low forward voltage drop
- Low leakage current
- 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 general purpose rectification of power Supplies.

Mechanical Data

- Case:DO-15 Plastic Package
- Polarity:Color band denotes cathode end

Maximum ratings

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

Parameter	Symbol	1N5399	Unit
Maximum recurrent peak reverse voltage	V _{RRM}	1000	V
Maximum RMS voltage	V _{RMS}	700	V
Maximum DC blocking voltage	V _{DC}	1000	V
Maximum average forward rectified current	I _{F(AV)}	1.5	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	50	A
Thermal Resistance	R _{thJA}	48	°C /W
Storage temperature range	T _s	-55 ~ 150	°C
Operating Junction temperature range	T _j	-55 ~ 125	°C

Electrical characteristics

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

Parameter	Test Conditions	Symbol	1N5399	Unit
Maximum forward voltage	I _F =1.5A	V _F	1.1	V
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I _R	5.0	μA
	TA=100°C		100	

Characteristics Curves

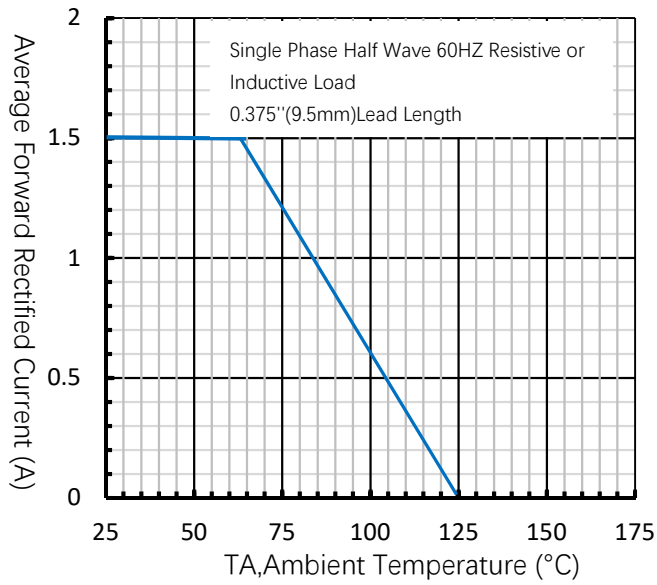


Fig.1 Forward Current Derating Curve

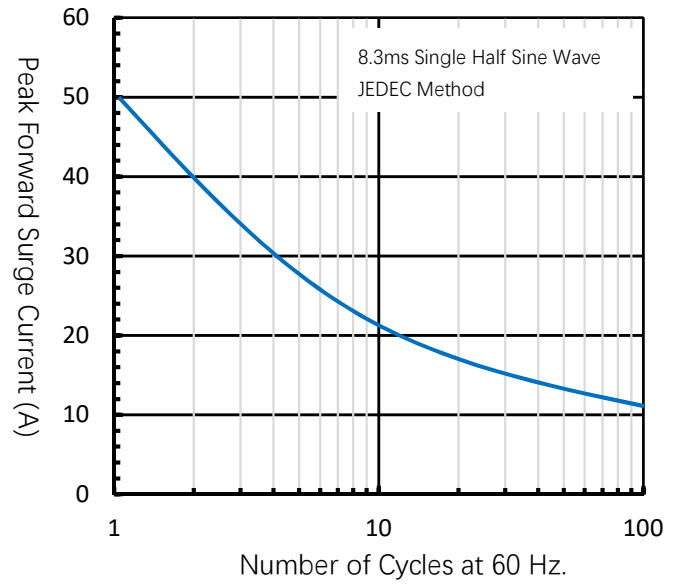


Fig.2 Forward Surge Current Capability

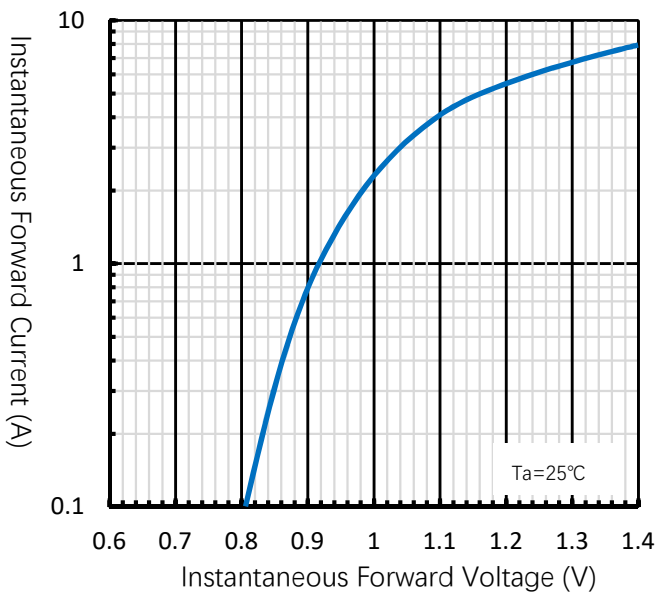


Fig. 3 Typical Forward Characteristic

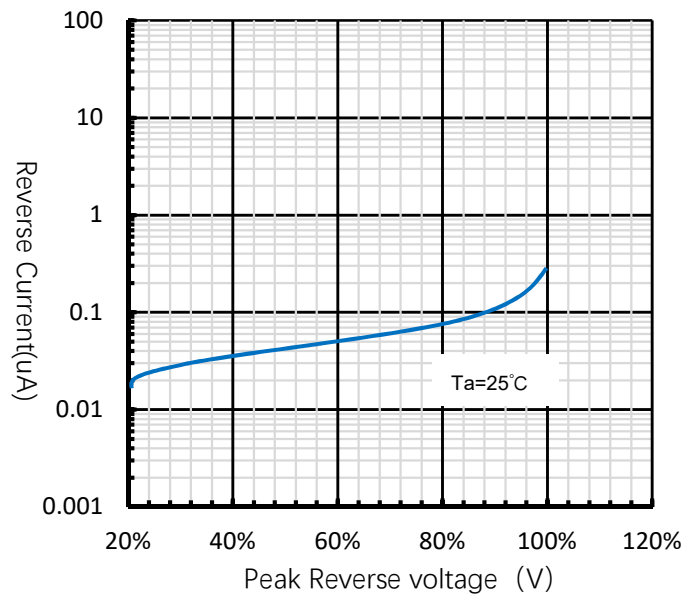


Fig. 4 Typical Reverse Characteristics