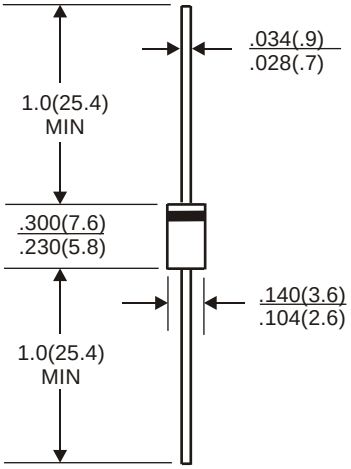
SEP ELECTRONIC CORP.

1N5391 thru 1N5399

1.5 A Plastic Silicon Rectifier

Rectifier Reverse Voltage 50 to 1000V

DO-15



All dimensions inches and (millimeters)

Features

- Diffused junction
- High current capability and low Forward Voltage Drop
- Surge overload rating to 50A peak
- Low reverse leakage current
- Plastic material has UL flammability classification 94V-0

Mechanical Data

Case: Molded plastic
Terminals: Solder plated solderable per MIL-STD-202, Method 208
Polarity: Cathode band
Mounting Position: Any
Weight: 0.4grams (approx)

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

Parameter	Symbol	1N 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	300	400	500	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	210	280	350	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	300	400	500	600	800	1000	V
Maximum average forward rectified output current at TA=75°C	IF(AV)	1.5									A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	50									A
Typical thermal resistancet	ReJA	40									℃/W
Typical junction capacitance per element	Cj	20									pF
Operating junction and storage temperature range	TJ, TSTG	-55 to + 175									℃

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
For Capacitive load derate by 20 %.

Parameter	Symbol	1N 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	Unit
Maximum instantaneous forward voltage drop per leg at 1.0A	VF	1.1									V
Maximum DC reverse current at TA =25°C ratedDC blocking voltage TA =125°C	IR	5.0 50.0									μA

Rating and Characteristic Curves (TA = 25°C Unless otherwise noted)
1N5391 thru 1N5399

Fig. 1 Derating Curve for Output Rectified Current

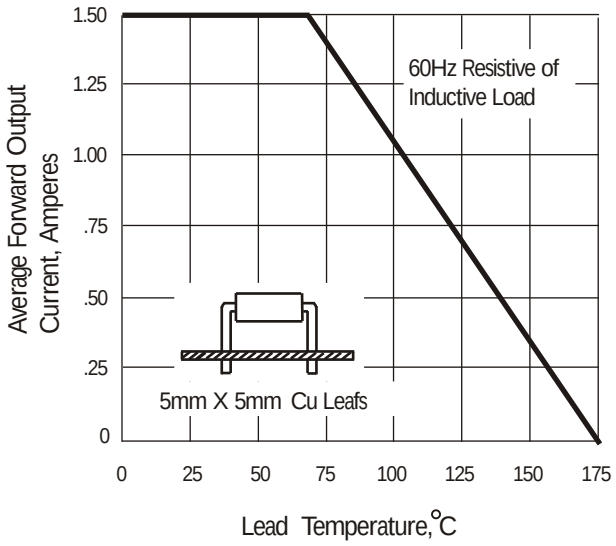


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

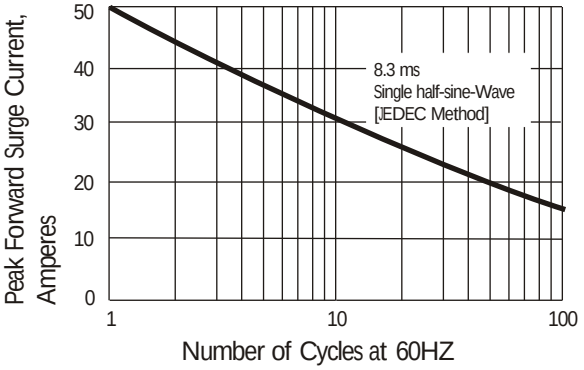


Fig. 3 Typical Instantaneous Forward Characteristics

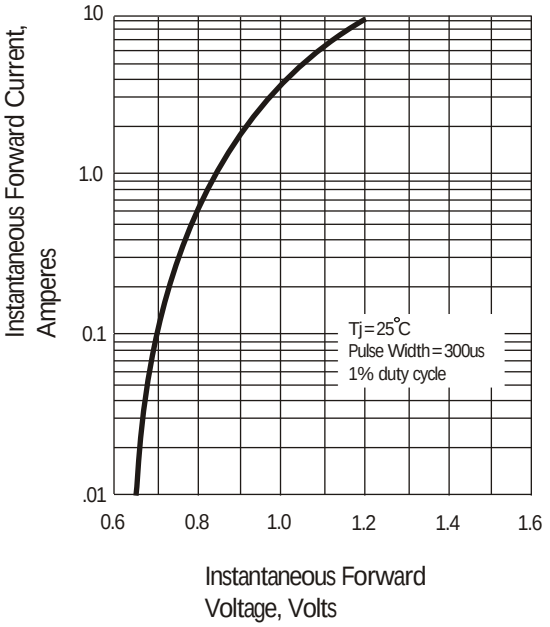


Fig. 4 Typical Reverse Characteristics

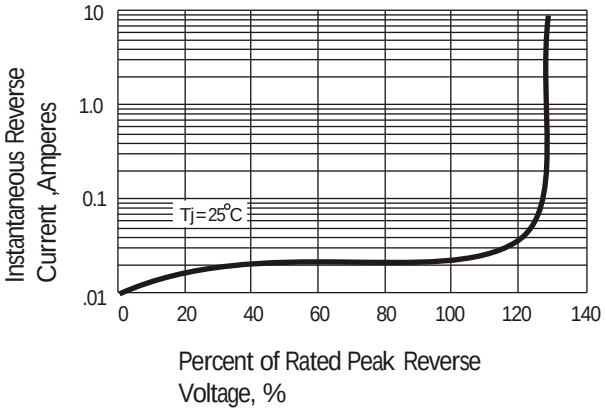


Fig. 5 Typical Junction Capacitance