

9347963 UNITRODE CORP

92D 10978 D

T-03-15
SES5001-SES5003**RECTIFIERS**

High Efficiency, 2A

FEATURES

- Fast Recovery Times
- Low Forward Voltage
- Small Size
- Convenient Package

DESCRIPTION

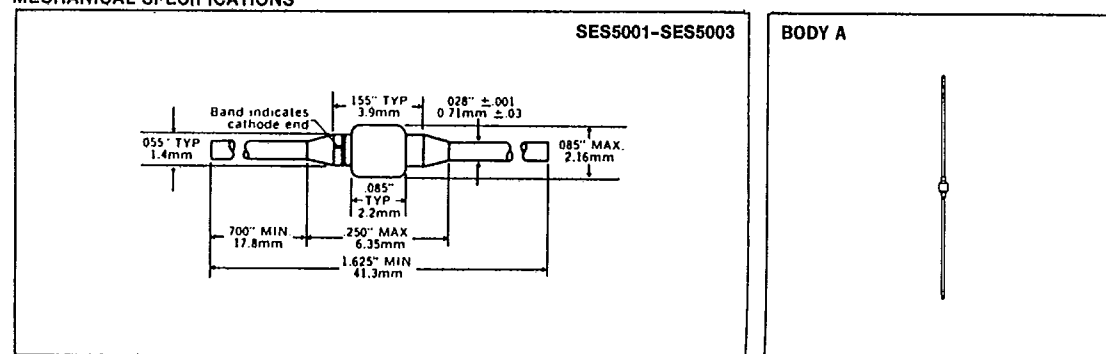
An axial loaded power rectifier useful in many switching applications. Particularly suited where very fast recovery and low forward voltage are required.

ABSOLUTE MAXIMUM RATINGS

Peak Inverse Voltage, SES5001	50V
Peak Inverse Voltage, SES5002	100V
Peak Inverse Voltage, SES5003	150V
Maximum Average D.C. Output Current at $T_L = 75^\circ\text{C}$, $L = 3/8"$	2A
Non-Repetitive Surge Current at 8.3ms	35A
Thermal Resistance, @ $L = 3/8"$38°C/W
Operating and Storage Temperature Range	-55°C + 175°C

ELECTRICAL SPECIFICATIONS

Type	PIV	Maximum Forward Voltage (V_F)		Maximum Reverse Current (I_R)		Maximum Reverse Recovery Time*
		@ $T_J = 25^\circ\text{C}$	@ $T_J = 100^\circ\text{C}$	@ $T_J = 25^\circ\text{C}$	@ $T_J = 100^\circ\text{C}$	
SES5001	50V	.975V	.895V			
SES5002	100V	@	@	2 μA	50 μA	100nS
SES5003	150V	1A	1A			

*Measured in circuit $I_F = .5\text{A}$, $I_R = 1.0\text{A}$, $t_{\text{REC}} = .25\text{A}$ **MECHANICAL SPECIFICATIONS**

THESE DEVICES ALSO AVAILABLE IN SURFACE MOUNT PACKAGE. SEE SECTION 11.

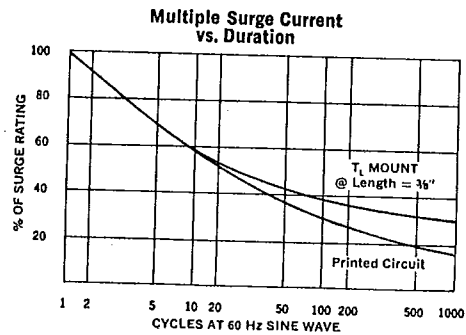
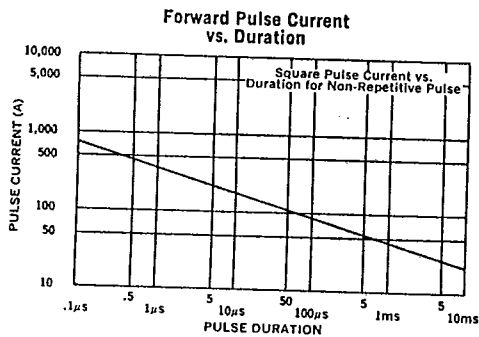
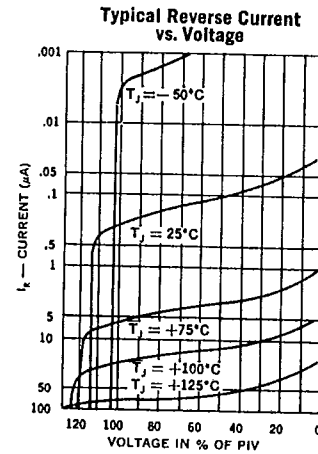
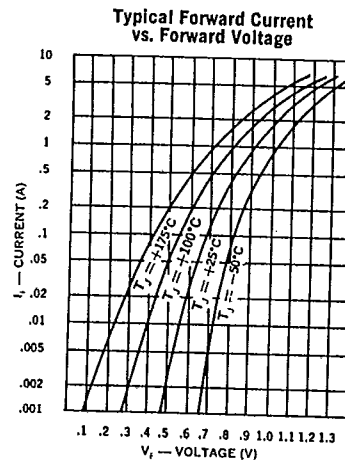
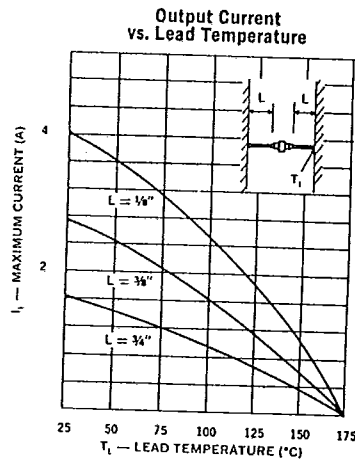
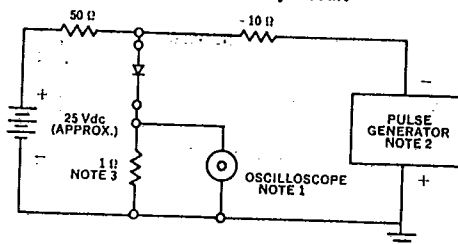
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**Reverse-Recovery Circuit****NOTES:**

1. Oscilloscope: Rise time ≤ 3 ns; Input impedance = 50 Ω .
2. Pulse Generator: Rise time ≤ 8 ns; source impedance 10 Ω .
3. Current viewing resistor, non-inductive, coaxial recommended.