



PRELIMINARY

SOLID STATE DEVICES, INC

14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

SHF1202
thru
SHF1206

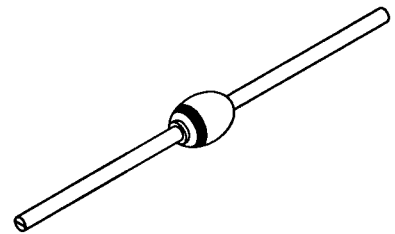
2 AMP
200-600 VOLTS
30 nsec
HYPER FAST
RECTIFIER

Designer's Data Sheet

FEATURES:

- Guaranteed High Temp. trr: 60 nsec max
- Hyper Fast Recovery: 30 nsec Maximum
- PIV to 600 Volts
- Void Free Construction
- Hermetically Sealed
- Low Reverse Leakage Current
- For High Efficiency Applications
- Replaces 1N6620 Series where faster trr is required
- TX, TXV and Space Level Screening

AXIAL



MAXIMUM RATINGS

| RATING | SYMBOL | VALUE | UNIT |
|--|------------|-------------|-------|
| Peak Repetitive Reverse and DC Blocking Voltage | | | |
| SHF1202 | VRRM | 200 | Volts |
| SHF1203 | | 300 | |
| SHF1204 | VRWM | 400 | |
| SHF1205 | | 500 | |
| SHF1206 | VR | 600 | |
| Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=55°C, L=3/8") | IO | 2 | Amps |
| Surge Current (Single 8.3 ms Pulse, Half Sine Superimposed on IO, TA=55°C) | IFSM | 20 | Amps |
| Repetitive Peak Surge Current (8.3 ms Pulse, allow junction to reach equilibrium between pulses, TA=55°C) | IFRM | 6 | Amps |
| Operating and storage temperature | Top & Tstg | -65 to +175 | °C |
| Maximum Thermal Resistance Junction to leads (L=3/8") | RθJL | 28 | °C/W |

NOTE: All specifications are subject to change without notification. SSD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: RH0021 D

RMD

**SHF1202
thru
SHF1206**

PRELIMINARY



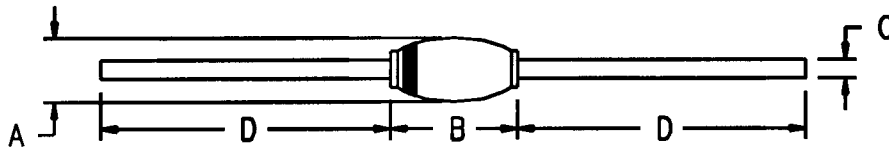
SOLID STATE DEVICES, INC

14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

ELECTRICAL CHARACTERISTICS

| CHARACTERISTICS | SYMBOL | MAXIMUM | UNIT |
|--|----------|----------|---------------|
| Instantaneous Forward Voltage Drop ($I_F = 1.2 \text{ Adc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse) | V_F | 1.7 | Vdc |
| Instantaneous Forward Voltage Drop ($I_F = 2 \text{ Adc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse) | V_F | 1.9 | Vdc |
| Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μs pulse minimum) | I_R | 10 | μA |
| Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, 300 μs pulse minimum) | I_R | 1 | mA |
| Junction Capacitance ($V_R = 10 \text{ Vdc}$, $T_A = 25^\circ\text{C}$, $f = 1 \text{ MHz}$) | C_J | 20 | pf |
| Reverse Recovery Time ($I_F = 500\text{mA}$, $I_R = 1\text{A}$, $I_{RR} = 250\text{mA}$, $T_A = 25^\circ\text{C}$) ($I_F = 500\text{mA}$, $I_R = 1\text{A}$, $I_{RR} = 250\text{mA}$, $T_A = 100^\circ\text{C}$) | t_{rr} | 30 60 | nsec |

PACKAGE OUTLINE:



DIMENSIONS

| DIM | MIN. | MAX. |
|-----|-------|-------|
| A | .100" | .150" |
| B | .100" | .180" |
| C | .027" | .033" |
| D | 1.00" | --- |

TYPICAL OPERATING CURVES

