

**SHF1402
 thru
 SHF1406**

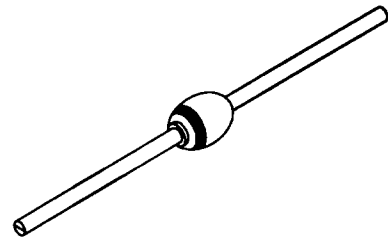
**4 AMP
 200-600 VOLTS
 30 nsec
 HYPER FAST
 RECTIFIER**

Designer's Data Sheet

FEATURES:

- Guaranteed High Temp. trr: 50nsec 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 1N6626 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 SHF1402 SHF1403 SHF1404 SHF1405 SHF1406 | VRRM VRWM VR | 200 300 400 500 600 | Volts |
| Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=55°C, L=3/8") | IO | 4 | Amps |
| Surge Current (Single 8.3 ms Pulse, Half Sine Superimposed on IO, TA=55°C) | IFSM | 75 | Amps |
| Repetitive Peak Surge Current (8.3 ms Pulse, allow junction to reach equilibrium between pulses, TA=55°C) | IFRM | 20 | Amps |
| Operating and storage temperature | Top & Tstg | -65 to +175 | °C |
| Maximum Thermal Resistance Junction to leads (L=3/8") | RθJL | 20 | °C/W |

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

DATA SHEET #: RH0023 A

RMD

SHF1402 thru SHF1406

PRELIMINARY



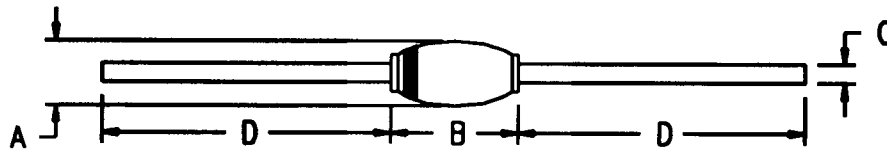
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ELECTRICAL CHARACTERISTICS

| CHARACTERISTICS | SYMBOL | MAXIMUM | UNIT |
|--|----------|----------|---------------|
| Instantaneous Forward Voltage Drop ($I_F = 3 \text{ A}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse) | V_F | 1.5 | Vdc |
| Instantaneous Forward Voltage Drop ($I_F = 4 \text{ A}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse) | V_F | 1.6 | 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 | 50 | 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 |

CASE OUTLINE:



DIMENSIONS

| DIM | MIN. | MAX. |
|-----|-------|-------|
| A | .140" | .170" |
| B | .170" | .230" |
| C | .047" | .053" |
| D | 1.00" | --- |

TYPICAL OPERATING CURVES

