

**SHF1302SMS
thru
SHF1306SMS**

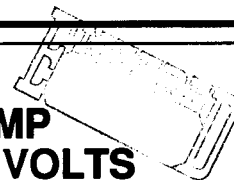
Designer's Data Sheet

FEATURES:

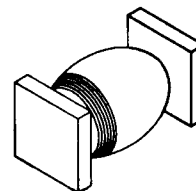
- Hyper Fast Recovery: 40 nsec Maximum
- PIV to 600 Volts
- Hermetically Sealed Surface Mount package
- Void Free Construction
- For High Efficiency Applications
- Single Chip Construction
- Replaces UES1304 Types

- TX, TXV and Space Level Screening available

**3 AMP
200-600 VOLTS
40 nsec
HYPER FAST
RECTIFIER**



**SURFACE MOUNT
SQUARE TAB**



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SHF1302SMS SHF1303SMS SHF1304SMS SHF1305SMS SHF1306SMS	VRRM VRWM VR	200 300 400 500 600	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	3	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on IO, allow junction to reach equilibrium between pulses, TA=25°C)	IFSM	75	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to End Tab	RθJE	14	°C/W

SHF1302SMS thru SHF1306SMS

PRELIMINARY



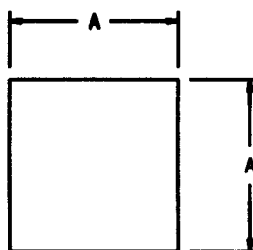
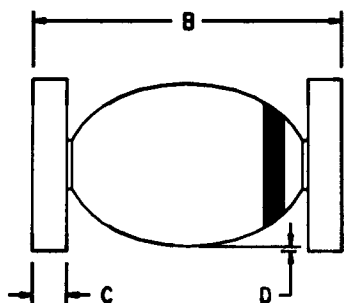
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 3 \text{ A}$, $T_A = 25^\circ\text{C}$, $300\mu\text{s}$ Pulse)	V_F	1.35	Vdc
Instantaneous Forward Voltage Drop ($I_F = 3 \text{ A}$, $T_A = -55^\circ\text{C}$, $300\mu\text{s}$ Pulse)	V_F	1.5	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, $300\mu\text{s}$ pulse minimum)	I_R	10	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, $300\mu\text{s}$ 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 ($I_F = 500 \text{ mA}$, $I_R = 1 \text{ A}$, $I_{RR} = 250 \text{ mA}$, $T_A = 25^\circ\text{C}$)	t_{rr}	40	nsec

CASE OUTLINE:



DIMENSIONS

DIM	MIN.	MAX.
A	.172"	.180"
B	.220"	.270"
C	.020"	.035"
D	.002"	---

TYPICAL OPERATING CURVES

$T_A = 25^\circ\text{C}$ Unless otherwise specified

