



Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, Ca 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

ssdi@ssdi-power.com * www.ssdi-power.com

DESIGNER'S DATA SHEET

Features:

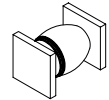
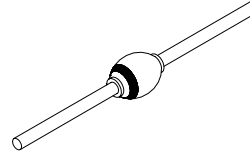
- Hyper Fast Recovery: 40 nsec maximum
- PIV to 900 Volts, Consult Factory
- Hermetically Sealed
- Void Free Construction
- For High Efficiency Applications
- Replaces UES 1104, UES1106, IN6624
- TX, TXV, S Level screening Available

**SHF1104 & SHF1104SMS
thru
SHF1109 & SHF1109SMS**

**1 AMP
400 - 900 V
Hyper Fast Rectifier**

Axial Lead Diode

SMS



Maximum Ratings		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	SHF1104	V_{RRM} V_{RSM} V_R	400	Volts
	SHF1106		600	
	SHF1108		800	
	SHF1109		900	
Average Rectified Forward Current (Resistive Load, 60 hz Sine Wave, $T_A = 25^\circ\text{C}$)		I_o	1.0	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$)		I_{FSM}	20	Amps
Operating & Storage Temperature		T_{OP} & T_{STG}	-65 to +175	$^\circ\text{C}$
Maximum Thermal Resistance	Junction to Leads, L = 3/8	$R_{\theta JE}$	35	$^\circ\text{C}/\text{W}$
	Junction to Tabs		28	

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

DATA SHEET #: RH0111E

DOC



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**SHF1104 & SHF1104SMS
 thru
 SHF1109 & SHF1109SMS**

Electrical Characteristic	Symbol	Max	Units
Instantaneous Forward Voltage Drop ($I_F = 1A_{DC}$, $T_A = 25^\circ C$ pulsed)	V_F	1.35	V_{DC}
Instantaneous Forward Voltage Drop ($I_F = 1A_{DC}$, $T_A = -55^\circ C$ pulsed)	V_F	1.5	V_{DC}
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ C$ pulsed)	I_R	10	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ C$ pulsed)	I_R	1	mA
Reverse Recovery Time ($I_F = 500mA$, $I_R = 1A$, $I_{RR} = 250mA$, $T_A = 25^\circ C$)	t_{RR}	40	nsec
Junction Capacitance ($V_R = 10V_{DC}$, $T_A = 25^\circ C$, $f = 1MHz$)	C_J	22	pF

Case Outline: (Axial)

DIM	MIN	MAX
A	0.100"	0.130"
B	0.130"	0.180"
C	0.027"	0.033"
D	1.00"	--

Case Outline: (SMS)

DIM	MIN	MAX
A	0.127"	0.140"
B	0.180"	0.230"
C	0.020"	0.030"
D	0.002"	--