



PRELIMINARY

SOLID STATE DEVICES, INC

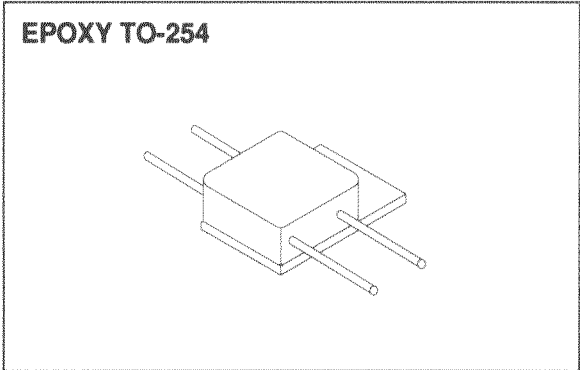
14849 Firestone Boulevard · La Mirada, CA 90638  
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

SFA1202ME4  
thru  
SFA1204ME4

## Designer's Data Sheet

- FEATURES:**
- Hyper Fast Recovery: 20 nsec Maximum
  - Isolated Low Profile Package
  - Hermetically Sealed SHF1204 Discretes
  - Higher Voltages Available
  - 150°C Operating Temperature
  - Low Reverse Leakage Current
  - For High Efficiency Applications
  
  - TX and TXV Screening Available

**10 AMP  
200-400 VOLTS  
20 nsec  
HYPER FAST  
SINGLE PHASE BRIDGE  
RECTIFIER**



## MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage Per Leg	VRRM	200	Volts
SFA1202ME4	VRWM	300	
SFA1203ME4	VR	400	
SFA1204ME4			
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=55°C)	IO	10	Amps
Surge Current (Single 8.3 ms Pulse, Half Sine Superimposed on IO, TA=55°C)	IFSM	125	Amps
Operating and storage temperature	Top & Tstg	-55 to +150	°C
Maximum Thermal Resistance Junction to Case, all legs tied together	RθJC	2.5	°C/W

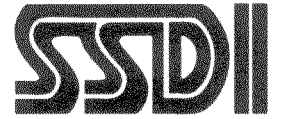
NOTE: All specifications are subject to change without notification.  
SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: RH0079 A

RMD

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**ELECTRICAL CHARACTERISTICS (Per Leg)**

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 1.2 \text{ A dc}$ , $T_A = 25^\circ \text{C}$ , 300 $\mu\text{s}$ Pulse)	<b>V<sub>F</sub></b>	1.4	Vdc
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 2 \text{ A dc}$ , $T_A = 25^\circ \text{C}$ , 300 $\mu\text{s}$ Pulse)	<b>V<sub>F</sub></b>	1.6	Vdc
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 25^\circ \text{C}$ , 300 $\mu\text{s}$ pulse minimum)	<b>I<sub>R</sub></b>	10	$\mu\text{A}$
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 100^\circ \text{C}$ , 300 $\mu\text{s}$ pulse minimum)	<b>I<sub>R</sub></b>	1	mA
<b>Junction Capacitance</b> ( $V_R = 10 \text{ Vdc}$ , $T_A = 25^\circ \text{C}$ , $f = 1 \text{ MHz}$ )	<b>C<sub>J</sub></b>	20	pf
<b>Reverse Recovery Time</b> ( $I_F = 500 \text{ mA}$ , $I_R = 1 \text{ A}$ , $I_{RR} = 250 \text{ mA}$ , $T_A = 25^\circ \text{C}$ ) ( $I_F = 500 \text{ mA}$ , $I_R = 1 \text{ A}$ , $I_{RR} = 250 \text{ mA}$ , $T_A = 100^\circ \text{C}$ )	<b>trr</b>	20 50	nsec

**CASE OUTLINE: TO-254 ME-4**

