



PRELIMINARY

SOLID STATE DEVICES, INC

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

**SFA10PJE  
thru  
SFA30PJE**

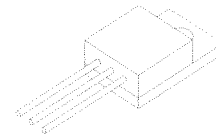
**6 AMP  
100-300 VOLTS  
40 nsec  
HYPER FAST  
POSITIVE CENTERTAP  
RECTIFIER**

## Designer's Data Sheet

### FEATURES:

- Hyper Fast Recovery: 40 nsec Maximum
- PIV to 300 Volts
- Isolated Low Profile Package
- Hermetically Sealed SPD630 Discretes
- Void Free Construction
- For High Efficiency Applications
  
- For Common Anode Configuration:  
SFA10NJE-SFA30NJE
- For Doubler Configuration:  
SFA10DJE-SFA30DJE
  
- TX and TXV Level Screening available

TO-257 (JE)



## MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	VRRM	100	Volts
SFA10PJE SFA20PJE SFA30PJE	VRWM	200	
	VR	300	
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	6	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	125	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Case	RθJC	3.5	°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#: RH0095 C

RMD

# SFA10PJE thru SFA30PJE

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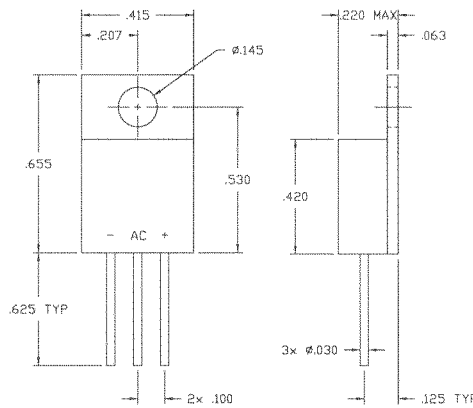
## ELECTRICAL CHARACTERISTICS (Per Leg)

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 6 Adc, TA=25°C, 300-500µs Pulse)	VF	0.95	Vdc
Instantaneous Forward Voltage Drop (IF = 6 Adc, TA=-55°C, 300-500µs Pulse)	VF	1.05	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300µs pulse minimum)	IR	20	µA
Reverse Leakage Current (Rated VR, TA=100°C, 300µs pulse minimum)	IR	3	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	100	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	40	nsec

## CASE OUTLINE: EPOXY TO-257

### PIN OUT:

- PIN 1: Anode 1
- PIN 2: Cathode
- PIN 3: Anode 2



## TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

