



PRELIMINARY

SOLID STATE DEVICES, INC

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

**SFA10PJE
thru
SFA30PJE**

Designer's Data Sheet

FEATURES:

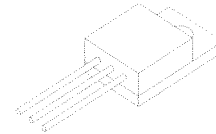
- Hyper Fast Recovery: 40 nsec Maximum
- PIV to 300 Volts
- Isolated Low Profile Package
- Hermetically Sealed SPD630 Discretes
- Void Free Construction
- For High Efficiency Applications

- For Common Anode Configuration:
SFA10NJE-SFA30NJE
- For Doubler Configuration:
SFA10DJE-SFA30DJE

- TX and TXV Level Screening available

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

TO-257 (JE)



MAXIMUM RATINGS

| RATING | SYMBOL | VALUE | UNIT |
|--|----------------------------|---------------------------|-------|
| Peak Repetitive Reverse and DC Blocking Voltage SFA10PJE SFA20PJE SFA30PJE | VRRM VRWM VR | 100 200 300 | Volts |
| 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

PRELIMINARY



SOLID STATE DEVICES, INC

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

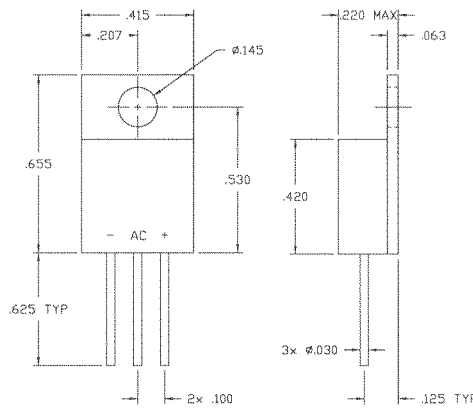
ELECTRICAL CHARACTERISTICS (Per Leg)

| 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

