

## Designer's Data Sheet

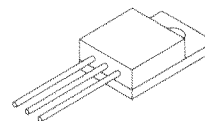
### FEATURES:

- Hyper Fast Recovery: 40 nsec Maximum
- PIV to 600 Volts
- Isolated Low Profile Package
- Hermetically Sealed SPD506 Discretes
- Void Free Construction
- For High Efficiency Applications
- For Common Anode Configuration:  
SFA40NME-SFA60NME
- For Doubler Configuration:  
SFA40DME-SFA60DME
- TX and TXV Level Screening available

**SFA40PME  
thru  
SFA60PME**

**6 AMP  
400-600 VOLTS  
40 nsec  
HYPER FAST  
POSITIVE CENTERTAP  
RECTIFIER**

TO-254 (ME)



### MAXIMUM RATINGS

| RATING                                                                                                                                  | SYMBOL                     | VALUE             | UNIT  |
|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------|-------|
| Peak Repetitive Reverse<br>and DC Blocking Voltage<br><br>SFA40PME<br>SFA50PME<br>SFA60PME                                              | VRRM<br><br>VRWM<br><br>VR | 400<br>200<br>600 | Volts |
| Average Rectified Forward Current<br>(Resistive Load, 60Hz, Sine Wave, TA=25°C)                                                         | IO                         | 6                 | Amps  |
| Peak Surge Current<br>(8.3 ms Pulse, Half Sine Wave Superimposed on IO, allow<br>junction to reach equilibrium between pulses, TA=25°C) | IFSM                       | 150               | Amps  |
| Operating and storage temperature                                                                                                       | Top & Tstg                 | -65 to +150       | °C    |
| Maximum Thermal Resistance<br>Junction to Case                                                                                          | 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#: RH0109 A

RMD

# SFA40PME thru SFA60PME

PRELIMINARY



SOLID STATE DEVICES, INC

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

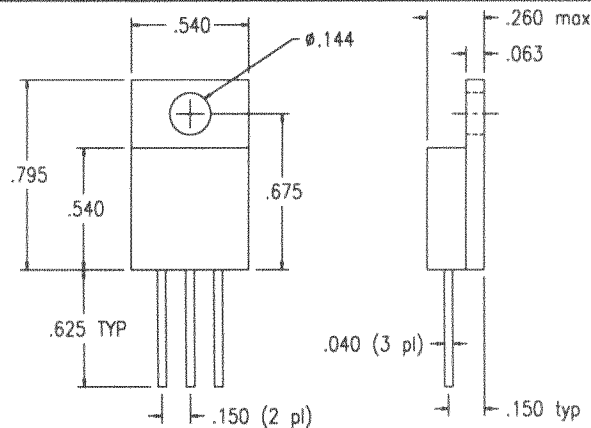
## ELECTRICAL CHARACTERISTICS (Per Leg)

| CHARACTERISTICS                                                             | SYMBOL | MAXIMUM | UNIT |
|-----------------------------------------------------------------------------|--------|---------|------|
| Instantaneous Forward Voltage Drop<br>(IF = 6 Adc, TA=25°C, 300µs Pulse)    | VF     | 1.35    | Vdc  |
| Instantaneous Forward Voltage Drop<br>(IF = 6 Adc, TA= - 55°C, 300µs Pulse) | VF     | 1.5     | Vdc  |
| Reverse Leakage Current<br>(Rated VR, TA=25°C, 300µs pulse minimum)         | IR     | 20      | µA   |
| Reverse Leakage Current<br>(Rated VR, TA=100°C, 300µs pulse minimum)        | IR     | 5       | mA   |
| Junction Capacitance<br>(VR = 10 Vdc, TA=25°C, f= 1 MHz )                   | CJ     | 100     | pf   |
| Reverse Recovery Time<br>(IF=500mA, IR=1 A, IRR=250mA, TA=25°C)             | trr    | 40      | nsec |

## CASE OUTLINE: EPOXY TO-254

### PIN OUT:

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



## TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

