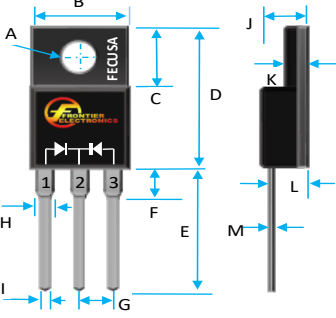


20A/120V BARRIER RECTIFIERS



| Dim. | Value in [mm] | |
|------|---------------|--------------|
| | Min. | Max. |
| A | 0.118[3.00] | 0.134[3.40] |
| B | 0.382[9.70] | 0.404[10.26] |
| C | 0.248[6.30] | 0.272[6.91] |
| D | 0.570[14.48] | 0.610[15.49] |
| E | 0.511[12.98] | 0.543[13.79] |
| F | --- | 0.161[4.09] |
| G | 0.095[2.41] | 0.105[2.67] |
| H | --- | 0.060[1.52] |
| I | --- | 0.035[0.89] |
| J | --- | 0.189[4.80] |
| K | --- | 0.122[3.10] |
| L | 0.098[2.49] | 0.114[2.90] |
| M | --- | 0.031[0.79] |

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. EXTREMELY LOW VF
3. LOW POWER LOSS/HIGH EFFICIENCY
4. FAST SWITCHING CAPABILITY
5. EXCELLENT HIGH TEMPERATURE STABILITY
6. CASE : TRANSFER MOLDED, ITO-220AB
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. POLARITY : AS MARKED
9. WEIGHT : 2.25 GRAM
10. MIL-STD-202, METHOD 208
11. ROHS & HALOGEN FREE

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED STORAGE AND OPERATING TEMPERATURE RANGE -55°C TO + 150°C. SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

| RATINGS | SYMBOL | VALUE | UNITS |
|--|--------|----------------|-------|
| MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT (SEE FIG.1) | IO | 10 | A |
| PK FWD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD PER LEG | IFSM | 180 | A |
| TYPICAL THERMAL RESISTANCE JUNCTION TO CASE PER LEG | Rajc | 4 | °C/W |
| MAXIMUM FORWARD VOLTAGE | VF | 0.79/0.65/0.92 | V |
| REVERSE CURRENT AT PER LEG (VR = VRRM, Tj =25°C) | IR | 100 | uA |
| REVERSE CURRENT AT PER LEG (VR = VRRM, Tj =125°C) | IR | 20000 | uA |
| PEAK REPETITIVE REVERSE SURGE CURRENT (2us-1kHz) | IRRM | 3 | A |

1. THERMAL RESISTANCE WITH HEATSINK SIZE AL PLATE (1.35" x 0.95" x 0.18")

2. MAXIMUM FORWARD VOLTAGE PER LEG AT 10A , 25°C / 10A , 125°C / 20A, 25°C

| PART NUMBER | MAXIMUM RECURRENT PEAK REVERSE VOLTAGE VRRM (V) | MAXIMUM RMS VOLTAGE VRMS (V) | MAXIMUM DC BLOCKING VOLTAGE VDC (V) |
|-------------|---|------------------------------|-------------------------------------|
| SBF20L120CT | 120 | 120 | 120 |

RATING AND CHARACTERISTIC CURVES

Fig. 1 - Forward Current Derating Curve (per diode)

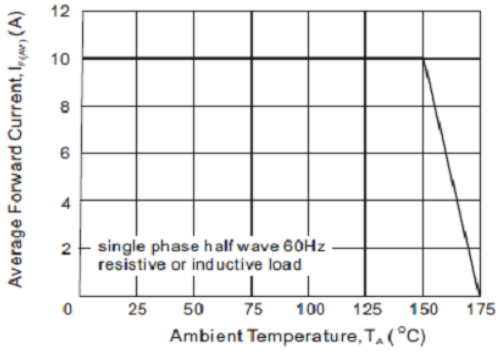


Fig. 2 - Instantaneous Forward Characteristics (per diode)

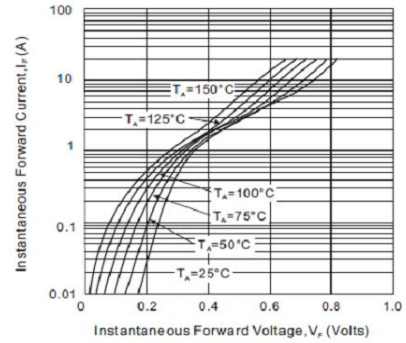


Fig. 3 - Reverse Characteristics (per diode)

