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## HIGH VOLTAGE FAST RECOVERY RECTIFIER

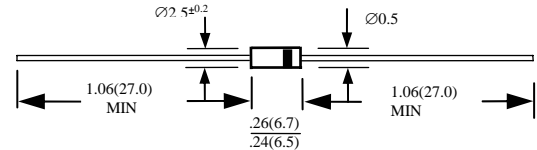
### FV5M-04-LFR THRU FV5M-24-LFR

#### FEATURES

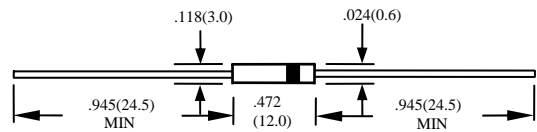
- FOR COLOR TV RECEIVERS / MONITORS  
TRIPLER CIRCUIT, DOUBLERS CIRCUIT, SINGLE CIRCUIT.  
MULTISTAGE SINGULAR FLY BACK TRANSFORMER.
- DIFFUSED-JUNCTION
- EXCELLENT HIGH TEMPERATURE OUTPUT CHARACTERISTICS
- ROHS

#### MECHANICAL DATA

- CASE: TRANSFER MOLDED, DIMENSIONS IN INCHES AND (MILLIMETERS)
- LEADS: SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY: CATHODE INDICATED BY COLOR BAND
- WEIGHT: FV5M-1 0.17GRAMS  
FV5M 0.35GRAMS



CASE: FV5M-1



CASE: FV5M

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

| RATINGS   | SYMBOL    | -04<br>-LFR   | -05<br>-LFR | -06<br>-LFR | -08<br>-LFR | -10<br>-LFR | -12<br>-LFR | -14<br>-LFR | -16<br>-LFR | -18<br>-LFR | -20<br>-LFR | -22<br>-LFR | -24<br>-LFR | UNITS |
|---|-----------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| MAXIMUM RECURRENT PEAK REVERSE VOLTAGE  | $V_{RRM}$ | 4000          | 5000        | 6000        | 8000        | 10000       | 12000       | 14000       | 16000       | 18000       | 20000       | 22000       | 24000       | V     |
| MAXIMUM RMS VOLTAGE   | $V_{RMS}$ | 2800          | 3500        | 4200        | 5600        | 7000        | 8400        | 9800        | 11200       | 12600       | 14000       | 15400       | 16800       | V     |
| MAXIMUM DC BLOCKING VOLTAGE   | $V_{DC}$  | 4000          | 5000        | 6000        | 8000        | 10000       | 12000       | 14000       | 16000       | 18000       | 20000       | 22000       | 24000       | V     |
| MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT<br>0.375"(9.5mm) LEAD LENGTH AT $T_A=55^{\circ}C$ | $I_O$     | 5             |             |             |             |             |             |             |             |             |             |             |             | mA    |
| PEAK FORWARD SURGE CURRENT  | $I_{FSM}$ | 0.5           |             |             |             |             |             |             |             |             |             |             |             | A     |
| TYPICAL JUNCTION CAPACITANCE (NOTE 1)   | $C_J$     | 1.0           |             |             |             |             |             |             |             |             |             |             |             | PF    |
| STORAGE TEMPERATURE RANGE   | $T_{STG}$ | - 55 TO + 135 |             |             |             |             |             |             |             |             |             |             |             | °C    |
| OPERATING TEMPERATURE RANGE   | $T_{OP}$  | - 55 TO + 135 |             |             |             |             |             |             |             |             |             |             |             | °C    |

#### ELECTRICAL CHARACTERISTICS ( $A_T T_A = 25^{\circ}C$ UNLESS OTHERWISE NOTED)

| CHARACTERISTICS                               | SYMBOL   | -04<br>-LFR | -05<br>-LFR | -06<br>-LFR | -08<br>-LFR | -10<br>-LFR | -12<br>-LFR | -14<br>-LFR | -16<br>-LFR | -18<br>-LFR | -20<br>-LFR | -22<br>-LFR | -24<br>-LFR | UNITS |
|---|----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| MAXIMUM FORWARD VOLTAGE AT 10mA DC            | $V_F$    | 12.0        | 16.0        | 20.0        | 25.0        | 30.0        | 37.5        | 42.5        | 50.0        | 55.0        | 62.5        | 75.0        | V           |       |
| MAXIMUM REVERSE CURRENT AT 25°C               | $I_R$    | 5           |             |             |             |             |             |             |             |             |             |             |             | μA    |
| MAXIMUM REVERSE RECOVERY TIME AT 25°C(NOTE 2) | $T_{RR}$ | 100         |             |             |             |             |             |             |             |             |             |             |             | nS    |
| PACKAGE                                       |          | FV5M-1      |             |             |             |             |             | FV5M        |             |             |             |             |             |       |

- NOTE: 1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS  
2. REVERSE RECOVERY TEST CONDITIONS:  $I_F=2mA$ ,  $I_R=4mA$ ,  $I_{RR}=1mA$

# RATINGS AND CHARACTERISTIC CURVES FV5M-04-LFR THRU FV5M-24-LFR

FIG. 1 TYPICAL REVERSE CHARACTERISTICS

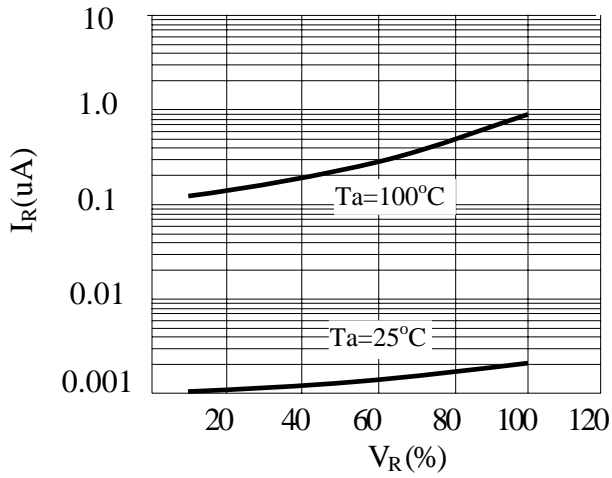


FIG. 2 TYPICAL JUNCTION CAPACITANCE

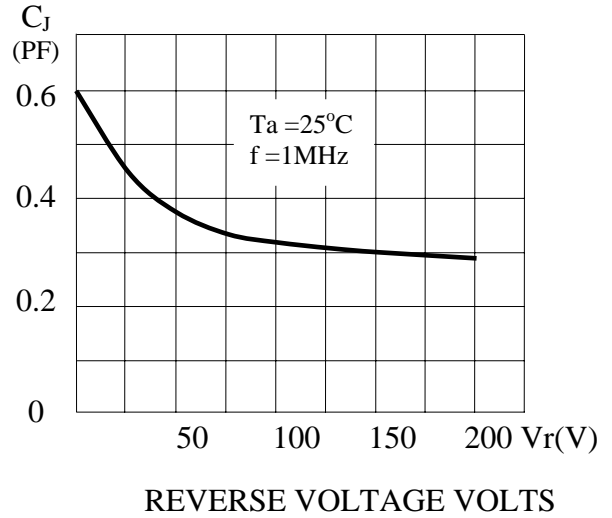


FIG. 3 TYPICAL DISTRIBUTION OF REVERSE RECOVERY TIME

