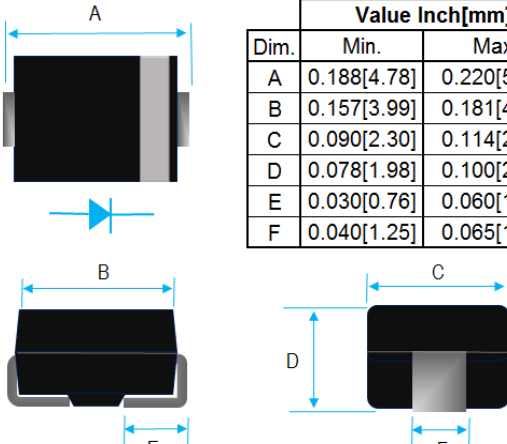


1A SURFACE MOUNT FAST RECOVERY RECTIFIERS

| | | | | |
|---|----------------|-------------|---|-------------|
|  | Value Inch[mm] | | PRODUCT FEATURES <ol style="list-style-type: none"> 1. FLAMMABILITY CLASSIFICATION: 94V-0 2. GLASS PASSIVATED CHIP JUNCTION 3. BUILT-IN STRAIN RELIEF 4. LOW PROFILE 5. FAST SWITCHING 6. CASE: MOLDED PLASTIC, DO-214AC (SMA) 7. DIMENSIONS IN INCHES AND (MILLIMETERS) 8. POLARITY: INDICATED BY CATHODE BAND 9. WEIGHT : 0.064 GRAMS 10. RoHS | |
| | Dim. | Min. | | Max. |
| | A | 0.188[4.78] | | 0.220[5.60] |
| | B | 0.157[3.99] | | 0.181[4.60] |
| | C | 0.090[2.30] | | 0.114[2.90] |
| | D | 0.078[1.98] | | 0.100[2.60] |
| | F | 0.040[1.25] | | 0.065[1.65] |

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%.

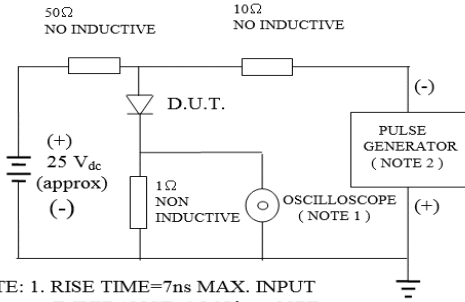
| RATINGS | SYMBOL | VALUE | UNITS |
|---|--------|-------|-------|
| MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT @ TL=90°C | IO | 1 | A |
| PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD | IFSM | 30 | A |
| TYPICAL JUNCTION CAPACITANCE(NOTE 1) | CJ | 15 | pF |
| TYPICAL THERMAL RESISTANCE (NOTE 2) | Rqja | 30 | °C/W |
| MAXIMUM FORWARD VOLTAGE | VF | 1.3 | V |
| MAXIMUM REVERSE CURRENT @ 25°C | IR | 5 | uA |

1. MEASURED @ 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 V
2. THERMAL RESISTANCE FROM JUNCTION TO TERMINAL 5.0mm² (.013 mm THICK) LAND AREAS
3. REVERSE RECOVERY TEST CONDITIONS: IF=0.5A, IR=1.0A, IRR=0.25A
4. MAXIMUM FORWARD VOLTAGE AT IO DC

| PART NUMBER | MAX RECURRENT PK REV VOLTAGE V_{RRM} (V) | MAX RMS VOLTAGE V_{RMS} (V) | MAX DC BLOCKING VOLTAGE V_{DC} (V) | MARKING | MAX REV RECOVERY TIME T_{RR} (nS) |
|-------------|--|-------------------------------|--------------------------------------|---------|-------------------------------------|
| RS1A | 50 | 35 | 50 | RS1A | 150 |
| RS1B | 100 | 70 | 100 | RS1B | 150 |
| RS1D | 200 | 140 | 200 | RS1D | 150 |
| RS1G | 400 | 280 | 400 | RS1G | 150 |
| RS1J | 600 | 420 | 600 | RS1J | 250 |
| RS1K | 800 | 560 | 800 | RS1K | 500 |
| RS1M | 1000 | 700 | 1000 | RS1M | 500 |

RATING AND CHARACTERISTIC CURVES

FIG. 1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTE: 1. RISE TIME=7ns MAX. INPUT IMPEDANCE=1 MOhms 22PF
 2. RISE TIME =10ns MAX. SOURCE IMPEDANCE=50 OHMS

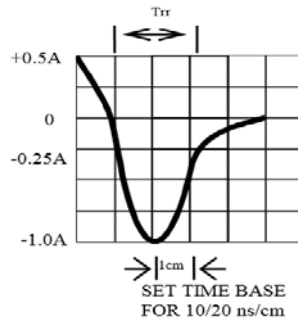


Fig. 2-MAXIMUM CURRENT DERATING CURVE

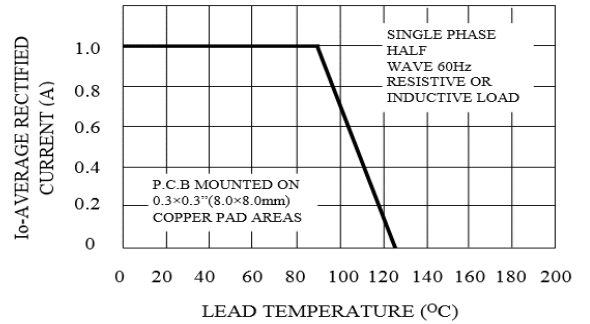


FIG. 3-TYPICAL JUNCTION CAPACITANCE

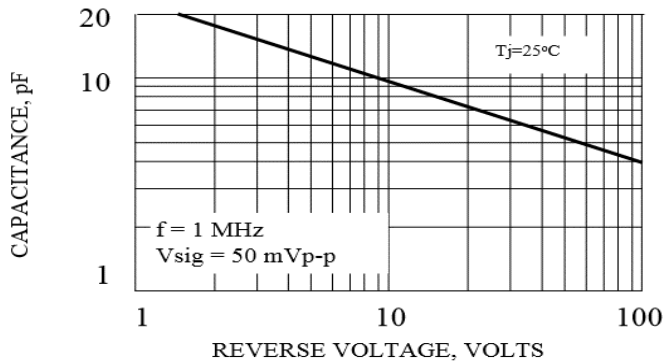


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

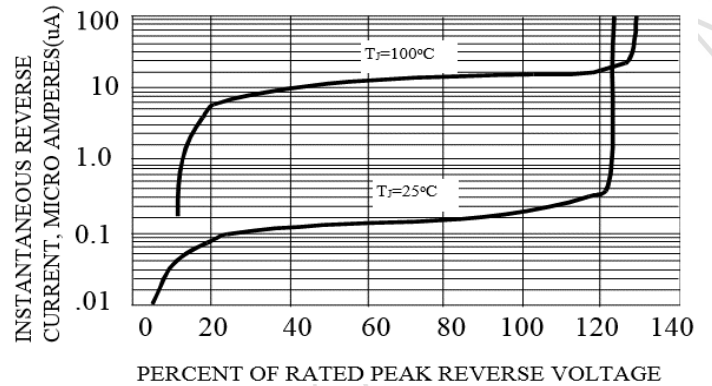


Fig. 5-MAXIMUM FORWARD SURGE CURRENT

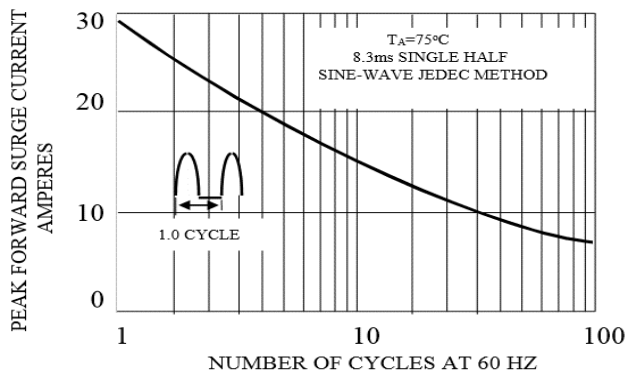


FIG. 6-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

