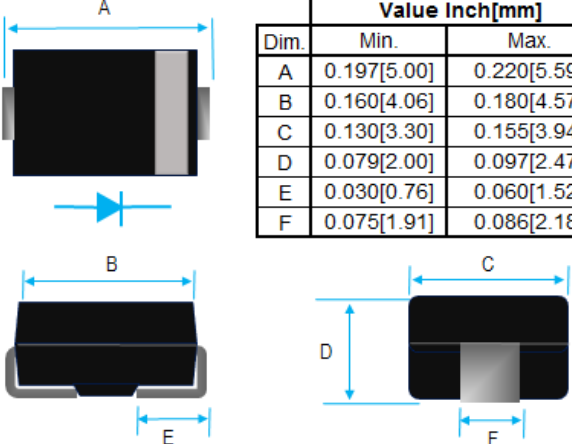


2A FAST RECOVERY SURFACE MOUNT RECTIFIER

|  | <table border="1"> <thead> <tr> <th colspan="3">Value Inch[mm]</th> </tr> <tr> <th>Dim.</th> <th>Min.</th> <th>Max.</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>0.197[5.00]</td> <td>0.220[5.59]</td> </tr> <tr> <td>B</td> <td>0.160[4.06]</td> <td>0.180[4.57]</td> </tr> <tr> <td>C</td> <td>0.130[3.30]</td> <td>0.155[3.94]</td> </tr> <tr> <td>D</td> <td>0.079[2.00]</td> <td>0.097[2.47]</td> </tr> <tr> <td>E</td> <td>0.030[0.76]</td> <td>0.060[1.52]</td> </tr> <tr> <td>F</td> <td>0.075[1.91]</td> <td>0.086[2.18]</td> </tr> </tbody> </table> | | Value Inch[mm] | | | Dim. | Min. | Max. | A | 0.197[5.00] | 0.220[5.59] | B | 0.160[4.06] | 0.180[4.57] | C | 0.130[3.30] | 0.155[3.94] | D | 0.079[2.00] | 0.097[2.47] | E | 0.030[0.76] | 0.060[1.52] | F | 0.075[1.91] | 0.086[2.18] | <h3>PRODUCT FEATURES</h3> <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 BODY, DO-214AA (SMB) 7. DIMENSIONS IN INCHES AND (MILLIMETERS) 8. POLARITY: INDICATED BY CATHODE BAND 9. WEIGHT : 0.093 GRAMS 10. RoHS |
|---|---|-------------|----------------|--|--|------|------|------|---|-------------|-------------|---|-------------|-------------|---|-------------|-------------|---|-------------|-------------|---|-------------|-------------|---|-------------|-------------|--|
| | Value Inch[mm] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dim. | Min. | Max. | | | | | | | | | | | | | | | | | | | | | | | | | |
| A | 0.197[5.00] | 0.220[5.59] | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | 0.160[4.06] | 0.180[4.57] | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | 0.130[3.30] | 0.155[3.94] | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | 0.079[2.00] | 0.097[2.47] | | | | | | | | | | | | | | | | | | | | | | | | | |
| E | 0.030[0.76] | 0.060[1.52] | | | | | | | | | | | | | | | | | | | | | | | | | |
| F | 0.075[1.91] | 0.086[2.18] | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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%.

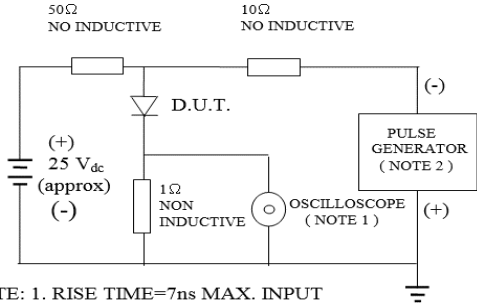
| RATINGS | SYMBOL | VALUE | UNITS |
|---|-----------------|-------|-------|
| MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT @ TL=90°C | I_o | 2 | A |
| PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD | I_{FSM} | 70 | A |
| TYPICAL JUNCTION CAPACITANCE(NOTE 1) | C_J | 40 | pF |
| TYPICAL THERMAL RESISTANCE (NOTE 2) | $R_{\theta ja}$ | 18 | °C/W |
| MAXIMUM FORWARD VOLTAGE | V_F | 1.3 | V |
| MAXIMUM REVERSE CURRENT @ 25°C | I_R | 5 | uA |

1. MEASURED @ 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 V
2. THERMAL RESISTANCE FROM JUNCTION TO LEAD P.C.B. MOUNTED ON 0.3x0.3"(8.0x8.0mm) COPPER PAD AREAS
3. REVERSE RECOVERY TEST CONDITIONS: $I_F=0.5A$, $I_R=1.0A$, $IRR=0$.
4. MAXIMUM FORWARD VOLTAGE AT I_o 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) |
|-------------|--|-------------------------------|--------------------------------------|---------|-------------------------------------|
| RS2A | 50 | 35 | 50 | RS2A | 150 |
| RS2B | 100 | 70 | 100 | RS2B | 150 |
| RS2D | 200 | 140 | 200 | RS2D | 150 |
| RS2G | 400 | 280 | 400 | RS2G | 150 |
| RS2J | 600 | 420 | 600 | RS2J | 250 |
| RS2K | 800 | 560 | 800 | RS2K | 500 |
| RS2M | 1000 | 700 | 1000 | RS2M | 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

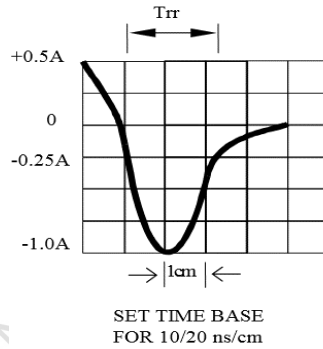


Fig. 2-MAXIMUM FORWARD CURRENT DERATING CURVE

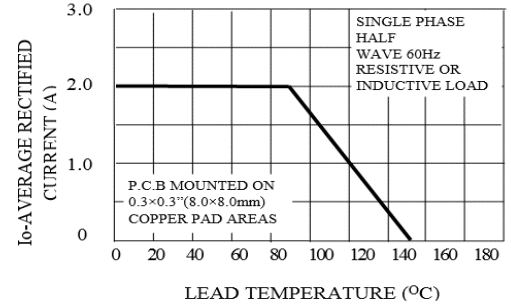


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

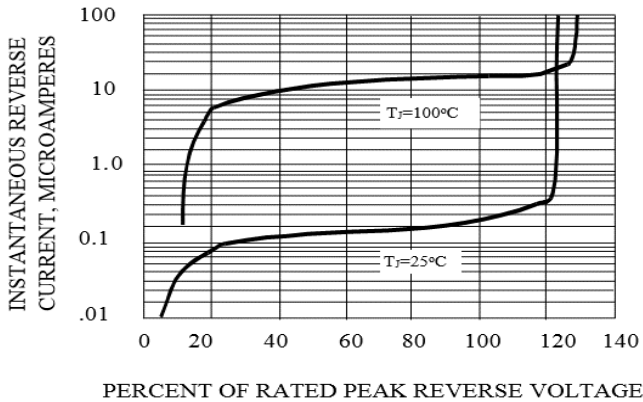


Fig. 4-MAXIMUM FORWARD SURGE CURRENT

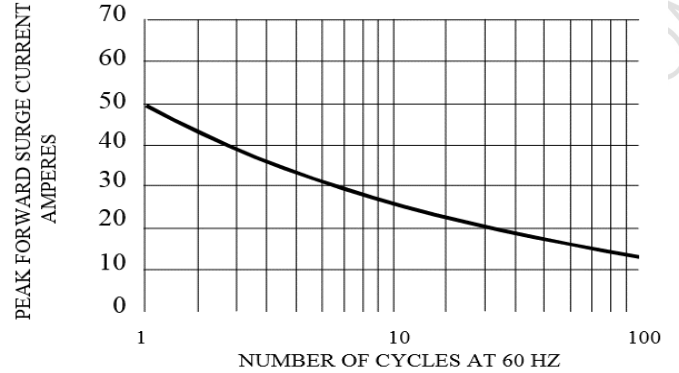


FIG. 5-TYPICAL JUNCTION CAPACITANCE

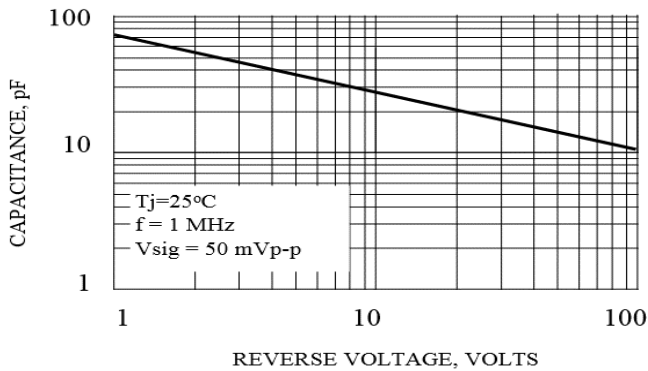


FIG. 6-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

