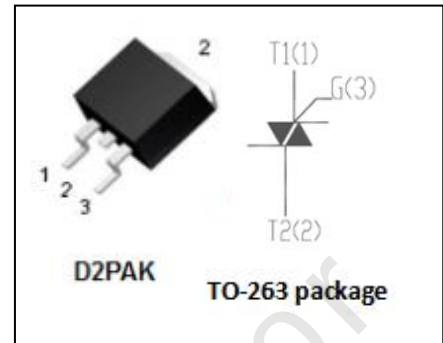


**FEATURES**

- With D2PAK package.
- Glass passivated triacs in a plastic envelope, for use in applications requiring high bidirectional transient and blocking voltage capability and high thermal cycling performance. Typical applications include motor control, industrial and domestic lighting, heating and static switching.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

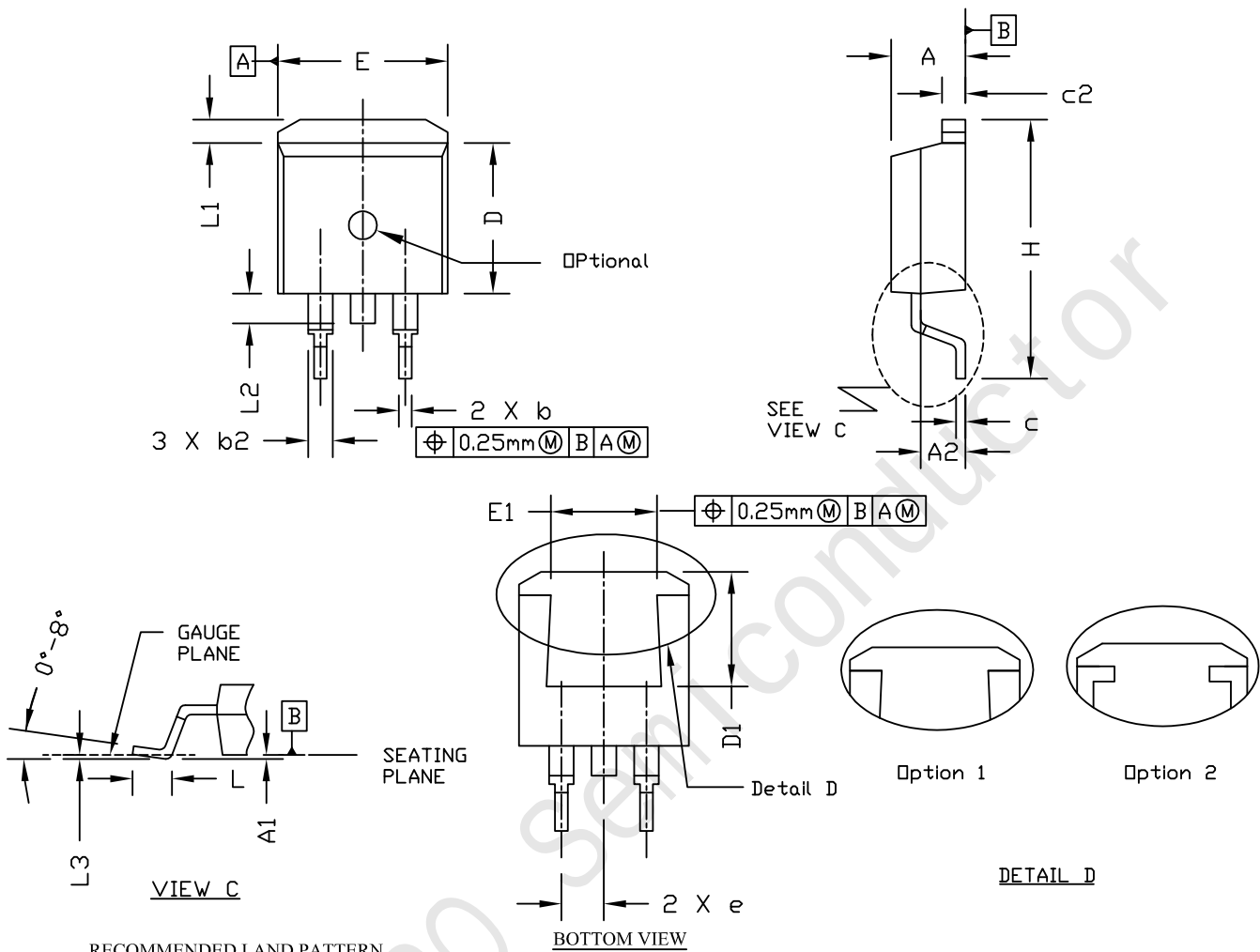

**ABSOLUTE MAXIMUM RATINGS(Ta=25℃)**

| SYMBOL       | PARAMETER                                       | MIN     | UNIT |
|--------------|-------------------------------------------------|---------|------|
| $V_{DRM}$    | Repetitive peak off-state voltage               | 600     | V    |
| $V_{RRM}$    | Repetitive peak off-state voltage               | 600     | V    |
| $I_{T(RMS)}$ | RMS on-state current (full sine wave)           | 16      | A    |
| $I_{TSM}$    | Non-repetitive peak on-state current $t_p=20ms$ | 160     | A    |
| $P_{GM}$     | Peak gate power dissipation                     | 5       | W    |
| $P_{G(AV)}$  | Average gate power dissipation                  | 0.5     | W    |
| $T_j$        | Operating junction temperature                  | 125     | ℃    |
| $T_{stg}$    | Storage temperature                             | -40~150 | ℃    |

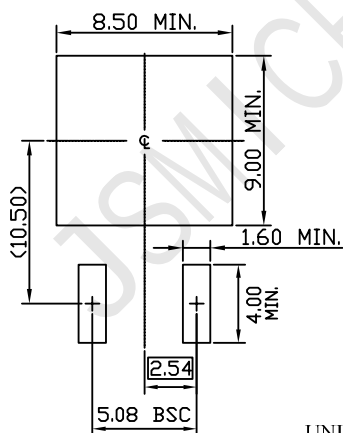
**ELECTRICAL CHARACTERISTICS (Tc=25℃ unless otherwise specified)**

| SYMBOL    | PARAMETER                         |     | CONDITIONS                                            | MIN | MAX         | UNIT |
|-----------|-----------------------------------|-----|-------------------------------------------------------|-----|-------------|------|
| $I_{RRM}$ | Repetitive peak reverse current   |     | $V_R=V_{RRM}$ ,<br>$V_R=V_{RRM}$ , $T_j=125^{\circ}C$ |     | 0.02<br>0.5 | mA   |
| $I_{DRM}$ | Repetitive peak off-state current |     | $V_D=V_{DRM}$ ,<br>$V_D=V_{DRM}$ , $T_j=125^{\circ}C$ |     | 0.02<br>0.5 | mA   |
| $I_{GT}$  | Gate trigger current              | I   | $V_D=12V$ ; $I_T=0.1A$                                |     | 35          | mA   |
|           |                                   | II  |                                                       |     | 35          |      |
|           |                                   | III |                                                       |     | 35          |      |
|           |                                   | IV  |                                                       |     | 70          |      |
| $V_{GT}$  | Gate trigger voltage              |     | $V_D=12V$ ; $I_T=0.1A$                                |     | 1.5         | V    |
| $V_{TM}$  | On-state voltage                  |     | $I_T=20A$                                             |     | 1.6         | V    |
| $I_H$     | Holding current                   |     | $I_{GT}=0.1A$ , $V_D=12V$                             |     | 30          | mA   |

# TO263(D2PAK) PACKAGE OUTLINE



RECOMMENDED LAND PATTERN



UNIT: mm

| SYMBOLS | DIMENSIONS IN MILLIMETERS |       |        | DIMENSIONS IN INCHES |       |       |
|---------|---------------------------|-------|--------|----------------------|-------|-------|
|         | MIN                       | NOM   | MAX    | MIN                  | NOM   | MAX   |
| A       | 4.064                     | 4.45  | 4.826  | 0.160                | 0.175 | 0.190 |
| A1      | 0.00                      | ---   | 0.254  | 0.000                | ---   | 0.010 |
| A2      | 2.20                      | 2.67  | 2.90   | 0.087                | 0.105 | 0.114 |
| b       | 0.508                     | 0.81  | 0.991  | 0.020                | 0.032 | 0.039 |
| b2      | 1.143                     | 1.27  | 1.778  | 0.045                | 0.050 | 0.070 |
| c       | 0.381                     | 0.50  | 0.737  | 0.015                | 0.020 | 0.029 |
| c2      | 1.143                     | 1.27  | 1.651  | 0.045                | 0.050 | 0.065 |
| D       | 8.382                     | 9.14  | 9.652  | 0.330                | 0.360 | 0.380 |
| D1      | 6.858                     | 8.00  | 8.37   | 0.270                | 0.315 | 0.330 |
| e       | 2.54 BSC                  |       |        | 0.100 BSC.           |       |       |
| E       | 9.652                     | 10.03 | 10.668 | 0.380                | 0.395 | 0.420 |
| E1      | 6.223                     | 8.00  | 8.37   | 0.245                | 0.315 | 0.330 |
| H       | 14.605                    | 15.24 | 15.875 | 0.575                | 0.600 | 0.625 |
| L       | 1.778                     | 2.54  | 2.794  | 0.070                | 0.100 | 0.110 |
| L1      | 1.02                      | 1.27  | 1.676  | 0.040                | 0.050 | 0.066 |
| L2      | 1.27                      | 1.52  | 1.778  | 0.50                 | 0.60  | 0.070 |
| L3      | 0.25 BSC                  |       |        | 0.010 BSC.           |       |       |

## NOTE:

1. PACKAGE BODY SIDES EXCLUDE MOLD FLASH AND GATE BURRS.  
MOLD FLASH SHOULD BE LESS THAN 6 MILS.
2. TOLERANCE 0.10 MILLIMETERS UNLESS OTHERWISE SPECIFIED.
3. DIMENSION L IS MEASURED IN GAUGE LINE.
4. CONTROLLING DIMENSION IS MILLIMETER.  
CONVERTED INCH DIMENSIONS ARE NOT NECESSARILY EXACT.
5. REFER TO JEDEC TO-263 AB.