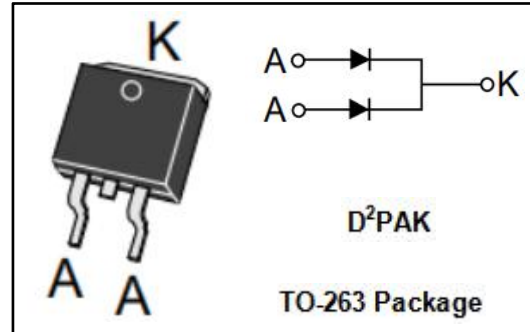


Schottky Barrier Rectifier**STPS40150CG****FEATURES**

- Guard -Ring for Stress Protection
- Low Forward Voltage
- High Operating Junction Temperature
- Guaranteed Reverse Avalanche
- Low Power Loss/High Efficiency
- High surge capability
- Low Stored Charge Majority Carrier Conduction
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**MECHANICAL CHARACTERISTICS**

- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max, for 10 Seconds.

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|--------------------|--|---------|------|
| V _{RRM} | Peak Repetitive Reverse Voltage | 150 | V |
| I _{F(AV)} | Average Rectified Forward Current | 40 | A |
| I _{FSM} | Nonrepetitive Peak Surge Current | 250 | A |
| T _J | Junction Temperature | 175 | °C |
| T _{stg} | Storage Temperature Range | -65~175 | °C |
| dv/dt | Voltage Rate of Change (Rated V _R) | 10,000 | V/μs |

THERMAL CHARACTERISTICS

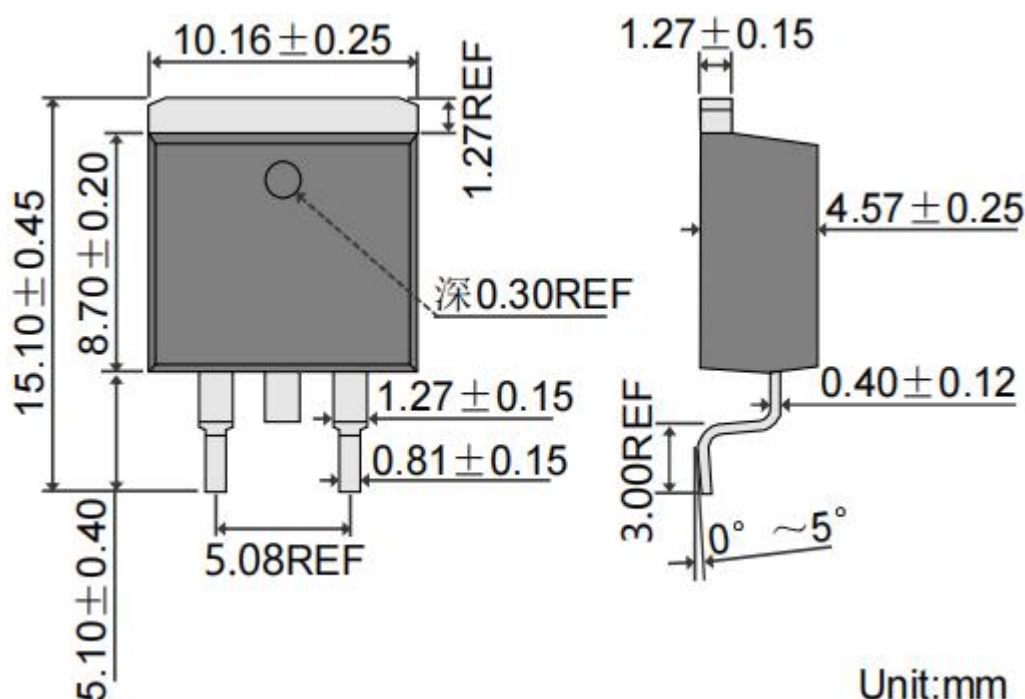
| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|--------------------------------------|-----|------|
| R _{th j-c} | Thermal Resistance, Junction to Case | 1.2 | °C/W |

Schottky Barrier Rectifier

STPS40150CG

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μs, Duty Cycle≤2%)

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|--------|---------------------------------------|---------------------------------------|------|------|
| V_F | Maximum Instantaneous Forward Voltage | $I_F = 20A$; $T_C = 25^\circ C$ | 0.92 | V |
| | | $I_F = 20A$; $T_C = 125^\circ C$ | 0.75 | |
| | | $I_F = 40A$; $T_C = 25^\circ C$ | 1.00 | |
| | | $I_F = 40A$; $T_C = 125^\circ C$ | 0.86 | |
| I_R | Maximum Instantaneous Reverse Current | Rated DC Voltage, $T_C = 25^\circ C$ | 8 | uA |
| | | Rated DC Voltage, $T_C = 125^\circ C$ | 11 | mA |

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