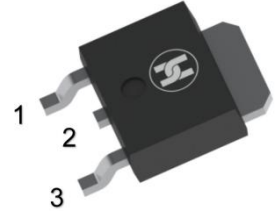
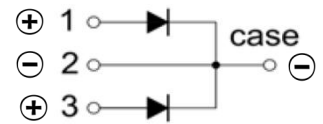


SCHOTTKY BARRIER DIODE
FEATURES

- Low power loss, high efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- Guard Ring for over voltage protection
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications


TO-263
MECHANICAL DATA

- Case: TO-263
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 1.60 grams (approximate)


MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|--|------------------|-----------|------|
| Repetitive peak reverse voltage | V _{RRM} | 100 | V |
| DC Reverse Voltage | V _R | 100 | V |
| RMS Reverse Voltage | V _{RMS} | 70 | V |
| Non-Repetitive Peak Forward Surge Current @ t = 8.3 ms | I _{FSM} | 120 | A |
| Mean rectifying current | I _F | 20 | A |
| Power dissipation | P _D | 2 | W |
| Thermal Resistance From Junction To Ambient | R _{θJA} | 50 | °C/W |
| Junction Temperature | T _J | 125 | °C |
| Storage Temperature | T _{STG} | -55 ~+150 | °C |

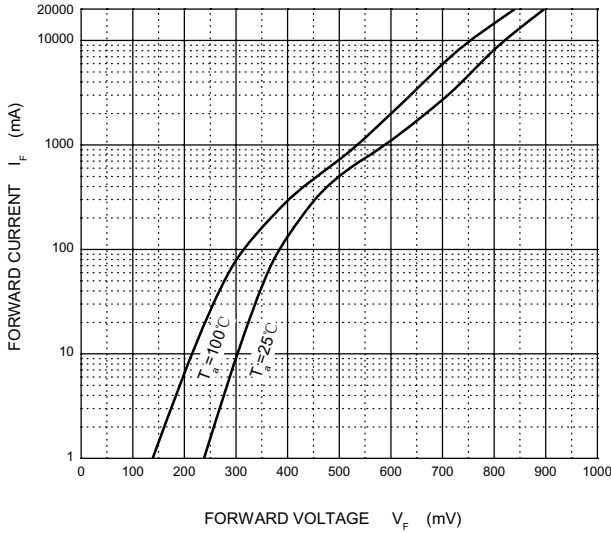
ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

| Parameter | Symbol | Min | Max | Unit | Conditions |
|-----------------|----------------|-----|-----|------|----------------------------------|
| Forward voltage | V _F | | 1.0 | V | I _F =10A |
| | | | 1.2 | V | I _F =20A (Pulse Test) |
| Reverse current | I _R | | 100 | μA | V _R =100V |
| Reverse voltage | V _R | 100 | | V | I _R =1mA |

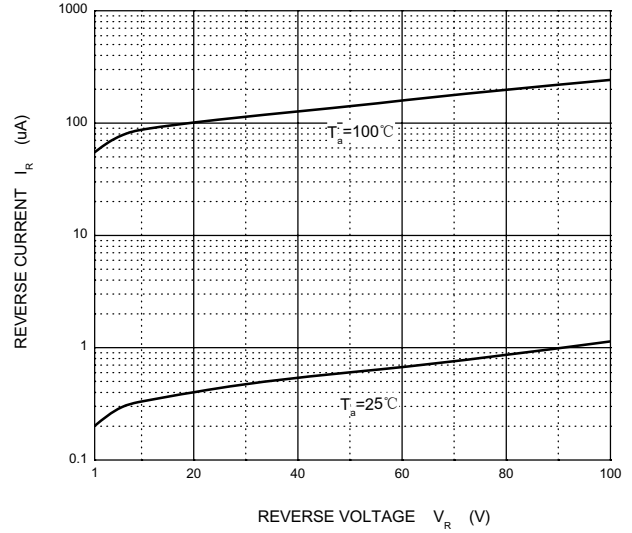
SCHOTTKY BARRIER DIODE

Typical Characteristics

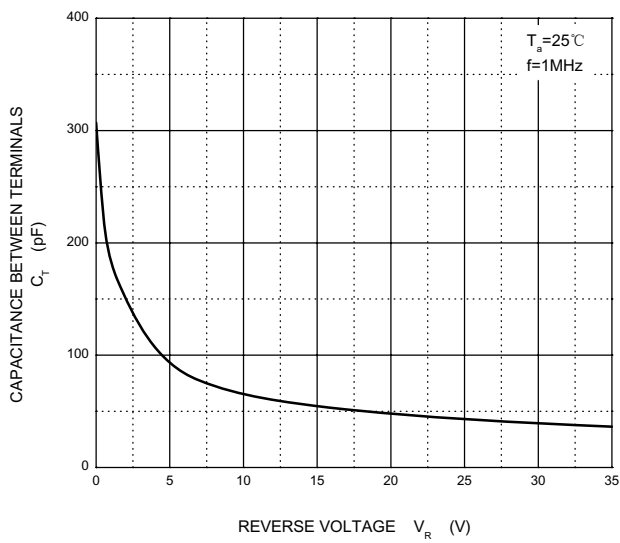
Forward Characteristics



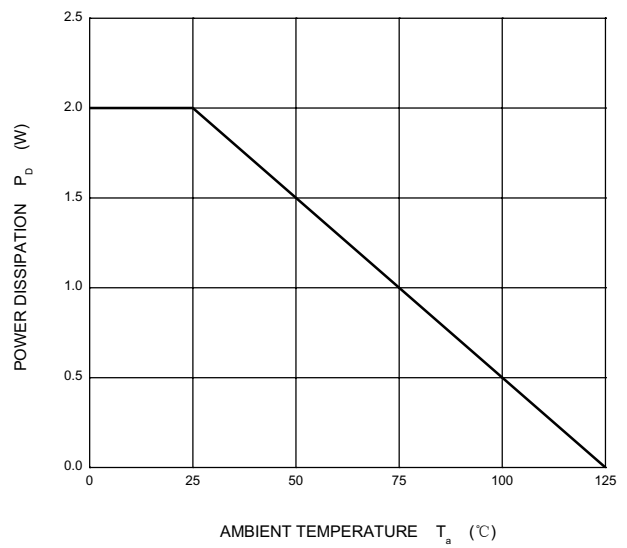
Reverse Characteristics

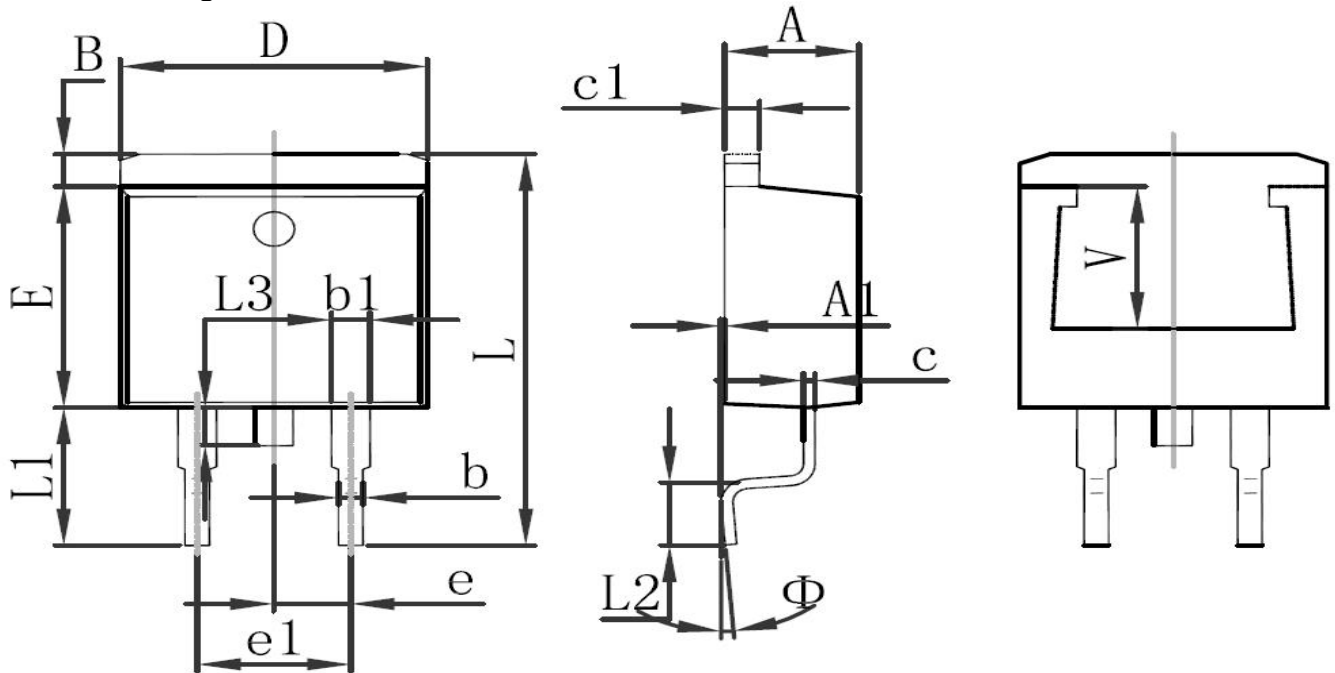


Capacitance Characteristics

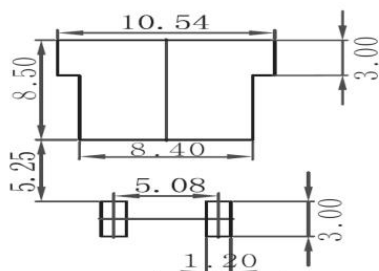


Power Derating Curve



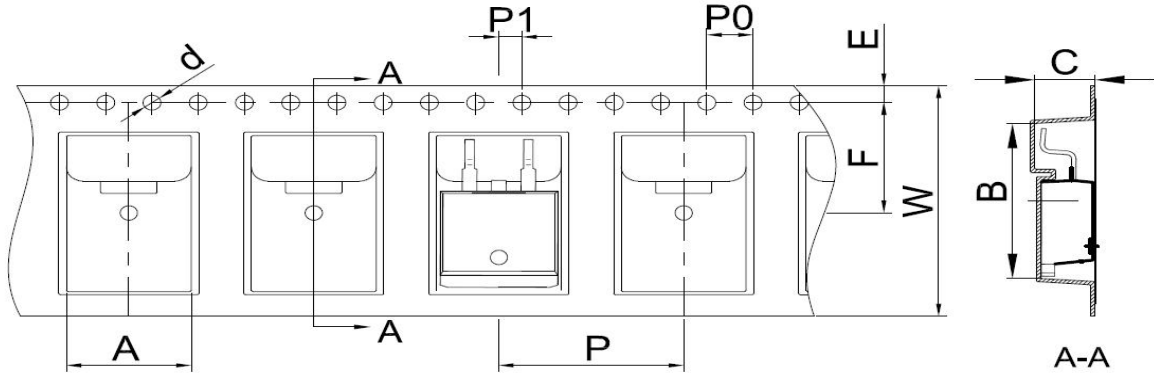
SCHOTTKY BARRIER DIODE
TO-263 Package Outline Dimensions


| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|---------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 4.470 | 4.670 | 0.176 | 0.184 |
| A1 | 0.000 | 0.150 | 0.000 | 0.006 |
| B | 1.120 | 1.420 | 0.044 | 0.056 |
| b | 0.710 | 0.910 | 0.028 | 0.036 |
| b1 | 1.170 | 1.370 | 0.046 | 0.054 |
| c | 0.310 | 0.530 | 0.012 | 0.021 |
| c1 | 1.170 | 1.370 | 0.046 | 0.054 |
| D | 10.010 | 10.3310 | 0.394 | 0.406 |
| E | 8.500 | 8.900 | 0.335 | 0.350 |
| e | 2.540T _{vp} | | 0.100T _{vp} | |
| e1 | 4.980 | 5.180 | 0.196 | 0.204 |
| L | 14.940 | 15.500 | 0.588 | 0.610 |
| L1 | 4.950 | 5.450 | 0.195 | 0.215 |
| L2 | 2.340 | 2.740 | 0.092 | 0.108 |
| L3 | 1.300 | 1.700 | 0.051 | 0.067 |
| ∅ | 0° | 8° | 0° | 8° |
| V | 5.600REF | | 0.220REF | |

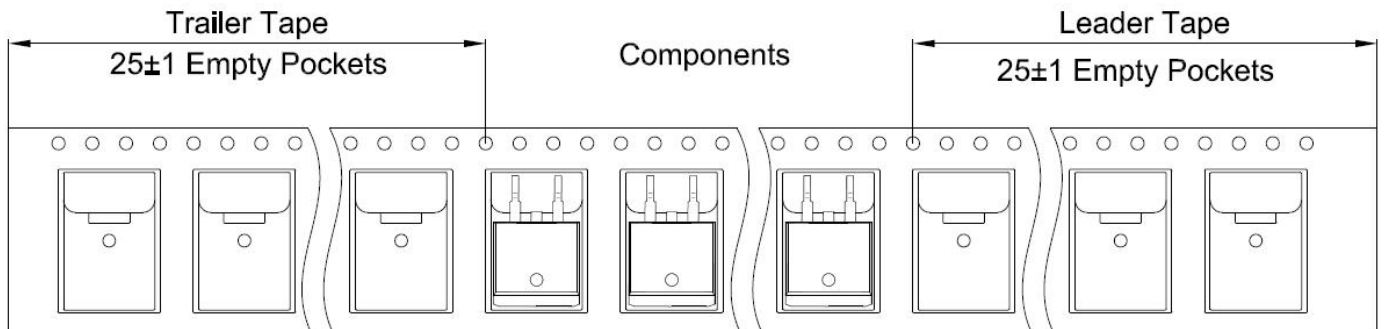
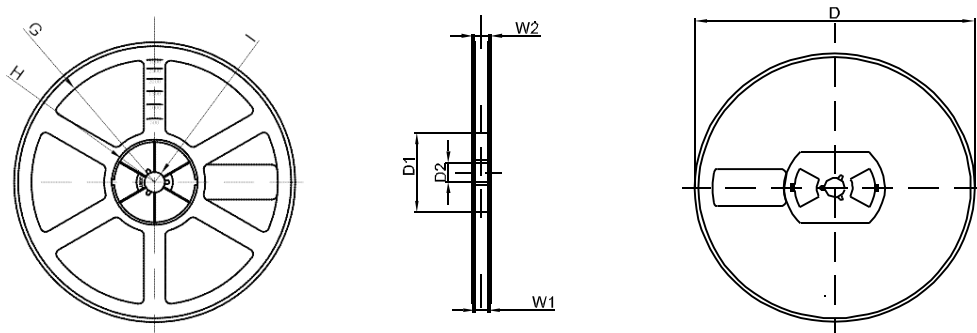
TO-263 Suggested Pad Layout

Note:

1. Controlling dimension: in millimeters
2. General tolerance: ±0.05mm
3. The pad layout is for reference purposes only

SCHOTTKY BARRIER DIODE

TO-263 Tape and Reel
TO-263 Embossed Carrier Tape


| DIMENSIONS ARE IN MILLIMETER | | | | | | | | | | |
|------------------------------|-------|-------|------|-------|------|-------|------|-------|------|-------|
| TYPE | A | B | C | d | E | F | P0 | P | P1 | W |
| TO-263 | 10.80 | 16.13 | 5.21 | Ø1.55 | 1.75 | 11.50 | 4.00 | 16.00 | 2.00 | 24.00 |
| TOLERANCE | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.1 |

TO-263 Tape Leader and Trailer

TO-263 Reel


| DIMENSIONS ARE IN MILLIMETER | | | | | | | | |
|------------------------------|------|-----|----|------|-----|------|------|-------|
| REEL OPTION | D | D1 | D2 | G | H | I | W1 | W2 |
| 13" DIA | Ø330 | 100 | 21 | R165 | R50 | R6.5 | 24.4 | 30.40 |
| TOLERANCE | ±2 | ±1 | ±1 | ±1 | ±1 | ±1 | ±1 | ±1 |