

Features

Low forward voltage drop

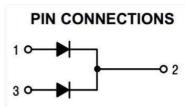
High efficiency and low power loss

High volume of current and good capability of surge current



Application

Freewheeling diodes DC/DC converters



Maxmim Ratings (Ta=25°C unless otherwise noted)

| Symbol | Parameters | Ratings | Unit |
|---------------------|--|---------|------------------------|
| V_{RRM} | Repetitive Peak Reverse Voltage | 100 | V |
| V _{RWM} | Working peak reverse voltage | 100 | V |
| V_R | Maximum DC blocking voltage | 100 | V |
| I _{F (AV)} | Maximum average forward rectified current Total device | 20 | А |
| I _{FSM} | Peak Forward Surge Current | 150 | А |
| Tj | Operating junction temperature range | 175 | $^{\circ}\!\mathbb{C}$ |
| T _{stg} | Storage temperature range | -55~175 | $^{\circ}$ |

Electrcal Charcteristics (Ta=25°C unless otherwise specified)

| Symbol | Parameters | Min | Typical | Max | Units | Conditions |
|----------------------|-----------------------------|-----|---------|-------|-------|---|
| I _R | Maximum Reverse Leakage | | | 15 | uA | V _R =V _{RRM} |
| | Current (Note 1) | | | | | T _C = 25 °C |
| V _F | Maximum Instantaneous | | 0.83 | 0.85 | V | I _F = 10 A, T _C = 25 °C |
| | Forward Voltage (Note 2) | | | | | |
| R _{th(j-c)} | Typical Thermal Resistance, | | | 3.0 | °C/W | |
| , | Junction to Case | | | | | |
| dV/dt | Voltage Rate of Change | | | 10000 | V/µs | |

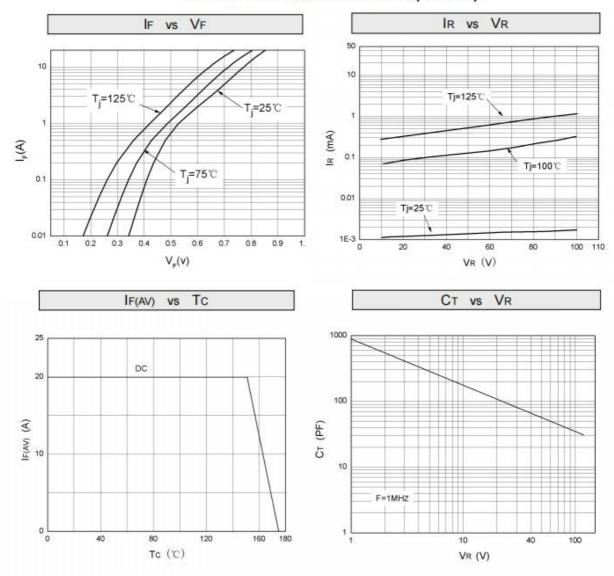
Note 1: 2.0uS Pulse Width, f=1.0KHz

Note 2: Pulse Test : 300us Pulse Width, 1% Duty Cycle



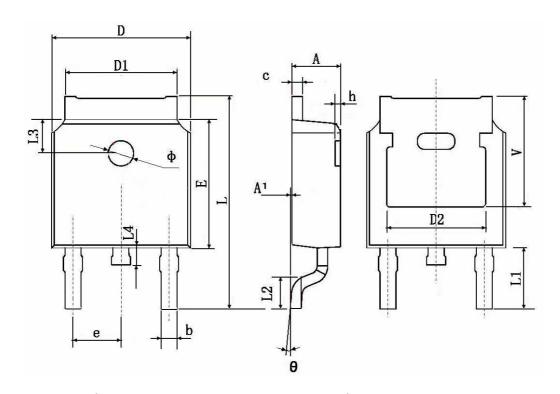
Typical Characteristics

ELECTRICAL CHARACTERISTICS (curves)

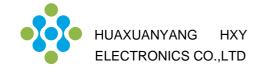




TO-252-2L Package Information



| 0 | Dimensions | In Millimeters | Dimensions In Inches | | |
|--------|------------|----------------|----------------------|-------|--|
| Symbol | Min. | Max. | Min. | Max. | |
| Α | A 2.200 | | 0.087 | 0.094 | |
| A1 | 0.000 | 0.127 | 0.000 | 0.005 | |
| b | 0.660 | 0.860 | 0.026 | 0.034 | |
| С | 0.460 | 0.580 | 0.018 | 0.023 | |
| D | 6.500 | 6.700 | 0.256 | 0.264 | |
| D1 | 5.100 | 5.460 | 0.201 | 0.215 | |
| D2 | 0.483 TYP. | | 0.190 TYP. | | |
| Е | 6.000 | 6.200 | 0.236 | 0.244 | |
| е | 2.186 | 2.386 | 0.086 | 0.094 | |
| L | 9.800 | 10.400 | 0.386 | 0.409 | |
| L1 | 2.900 TYP. | | 0.114 TYP. | | |
| L2 | 1.400 | 1.700 | 0.055 | 0.067 | |
| L3 | 1.600 TYP. | | 0.063 TYP. | | |
| L4 | 0.600 | 1.000 | 0.024 | 0.039 | |
| Ф | 1.100 | 1.300 | 0.043 | 0.051 | |
| θ | 0° | 8° | 0° | 8° | |
| h | 0.000 | 0.300 | 0.000 | 0.012 | |
| V | 5.350 TYP. | | 0.211 TYP. | | |



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