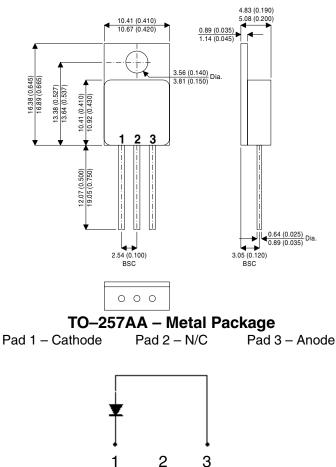
16YQ100C



MECHANICAL DATA Dimensions in mm



SINGLE SCHOTTKY BARRIER DIODE IN HERMETIC TO-257 METAL PACKAGE FOR HI-REL APPLICATIONS

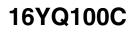
FEATURES

- HERMETIC METAL PACKAGE
- SCREENING OPTIONS AVAILABLE
- OUTPUT CURRENT 16A
- LOW V_F
- LOW LEAKAGE

ABSOLUTE MAXIMUM RATINGS ($T_{case} = 25^{\circ}C$ unless otherwise stated)

| V _{RRM} | DC Reverse Voltage | 100V |
|--------------------|---|----------------|
| V _{RSM} | Peak Non-Repetitive Reverse Voltage | 100V |
| V _R | Continuous Reverse Voltage | 100V |
| I _{F(AV)} | Maximum Average Forward Current | 16A |
| I _{FSM} | Peak Non-Repetitive Surge Current at 60Hz (per leg) | 250A |
| T _{STG} | Storage Temperature Range | -55°C to 150°C |
| TJ | Maximum Operating Junction Temperature | -55°C to 150°C |

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.





ELECTRICAL CHARACTERISTICS ($T_{CASE} = 25^{\circ}C$ unless otherwise stated)

| Parameter | | Test Conditions | | Min. | Тур. | Max. | Unit |
|--------------------|-------------------------------------|---------------------------------------|------------------------|------|------|-------|------|
| V _R | Max. DC Reverse Voltage | | | | | 100 | v |
| V _{RWM} | Max. Working Peak Reverse Voltage | | | | | 100 | 1 |
| I _{F(AV)} | Average Forward Current | 50% Duty Cycle | T _C =132°C | | | 16 | |
| I _{FSM} | Peak Non-Repetitive Surge Current | T _P =8.3ms Half Sine | | | | 250 | A |
| V _{FSM} | Forward Voltage Drop | I _F =15A | T _J =-55°C | | | 0.76 | - V |
| | | I _F =7.5A | T _J =-55°C | | | 0.64 | |
| | | I _F =15A | $T_J = 25^{\circ}C$ | | | 0.785 | |
| | | I _F =7.5A | $T_J = 25^{\circ}C$ | | | 0.60 | |
| | | I _F =15A | T _J = 125°C | | | 0.71 | |
| | | I _F =7.5A | T _J = 125°C | | | 0.54 | |
| I _{RM} | Reverse Leakage Current | V _R = Rated V _R | $T_J = 25^{\circ}C$ | | | 0.04 | mA |
| | | | $T_J = 100^{\circ}C$ | | | 7.1 | |
| | | | T _J = 125°C | | | 30 | |
| CT | Junction Capacitance | $V_{R} = 5V_{DC}$ | (1MHz, 25°C) | | | 1400 | pF |
| Ls | Typical Series Inductance | (Anode Lead to Cathode Lead) | | | | 9.8 | nH |
| R_{thJC} | Thermal Resistance Junction to Case | | | | | 1.15 | °C/W |

*Pulse test tp=300 μ s $\delta \leq 2\%$

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