

isc N-Channel MOSFET Transistor

IPW90R340C3

• FEATURES

- Static drain-source on-resistance: R_{DS}(on)≤340mΩ
- Enhancement mode:
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRITION

· High peak current capability

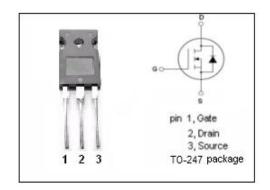


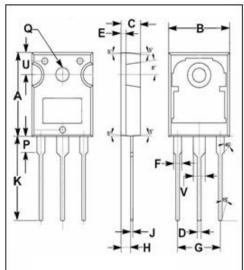
• ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT | |
|------------------|--|---------|------------------------|--|
| V _{DSS} | Drain-Source Voltage | 900 | V | |
| V _{GS} | Gate-Source Voltage | ±20 | V | |
| I _D | Drain Current-Continuous | 15 | А | |
| I _{DM} | Drain Current-Single Pulsed | 34 | А | |
| P _D | Total Dissipation @T _C =25℃ | 208 | W | |
| Tj | Max. Operating Junction Temperature | 150 | $^{\circ}\!\mathbb{C}$ | |
| T _{stg} | Storage Temperature | -55~150 | $^{\circ}$ C | |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|----------|---------------------------------------|-----|------|
| Rth(j-c) | Channel-to-case thermal resistance | 0.6 | °C/W |
| Rth(j-a) | Channel-to-ambient thermal resistance | | °C/W |





| 1 | mm | | | |
|-----|-------|-------|--|--|
| DIM | MIN | MAX | | |
| Α | 19.80 | 20.20 | | |
| В | 15.40 | 15.80 | | |
| C | 4.90 | 5.10 | | |
| D | 0.90 | 1.10 | | |
| E | 1.40 | 1.60 | | |
| F | 1.90 | 2.10 | | |
| G | 10.80 | 11.00 | | |
| Н | 2.40 | 2.60 | | |
| J | 0.50 | 0.70 | | |
| K | 19.50 | 20.50 | | |
| P | 3.90 | 4.10 | | |
| Q | 3.30 | 3.50 | | |
| U | 5.20 | 5.40 | | |
| ٧ | 2.90 | 3.10 | | |



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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | ТҮР | MAX | UNIT |
|---------------------|--------------------------------|--|-----|-----|-----|------------|
| BV _{DSS} | Drain-Source Breakdown Voltage | V _{GS} =0V; I _D =1mA | 900 | | | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} =V _{GS} ; I _D =1mA | 2.5 | | 3.5 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} =10V; I _D =9.2A | | | 340 | mΩ |
| I _{GSS} | Gate-Source Leakage Current | V _{GS} = 20V; V _{DS} =0V | | | 0.1 | mA |
| I _{DSS} | Drain-Source Leakage Current | V _{DS} =900V; V _{GS} = 0V | | | 2 | μ А |
| V _{SD} | Diode forward voltage | I _F =9.2A, V _{GS} = 0V | | | 1.2 | V |

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