

isc P-Channel MOSFET Transistor
SPB80P06P
• FEATURES

- Static drain-source on-resistance:
 $R_{DS(on)} \leq 23m\Omega (@V_{GS} = -10V; I_D = -64A)$
- Advanced trench process technology
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

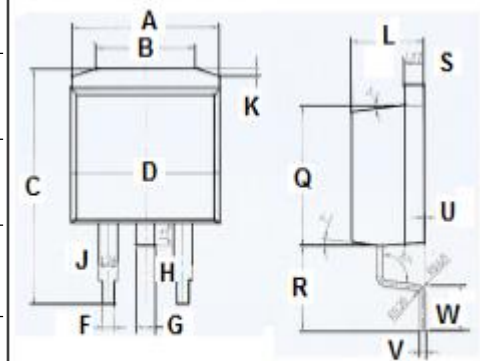
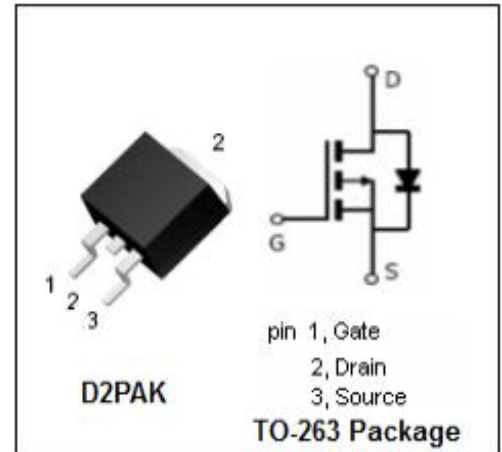
- Fast switching application.

• ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ C$)

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|--------------------------------------|----------|------------|
| V_{DSS} | Drain-Source Voltage | -60 | V |
| V_{GS} | Gate-Source Voltage | ± 20 | V |
| I_D | Drain Current-Continuous | -80 | A |
| P_D | Total Dissipation @ $T_c=25^\circ C$ | 340 | W |
| T_j | Max. Operating Junction Temperature | -55~175 | $^\circ C$ |
| T_{stg} | Storage Temperature | -55~175 | $^\circ C$ |

• THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|------------------------------------|-----|--------------|
| $R_{th(j-c)}$ | Channel-to-case thermal resistance | 0.4 | $^\circ C/W$ |



| DIM | mm | |
|-----|-------|-------|
| | MIN | MAX |
| A | 10 | |
| B | 6.6 | 6.8 |
| C | 15.23 | 15.25 |
| D | 10.15 | 10.17 |
| F | 0.76 | 0.78 |
| G | 1.26 | 1.28 |
| H | 1.4 | 1.6 |
| J | 1.33 | 1.35 |
| K | 0.4 | 0.6 |
| L | 4.6 | 4.8 |
| Q | 8.69 | 8.71 |
| R | 5.28 | 5.30 |
| S | 1.26 | 1.28 |
| U | 0.0 | 0.2 |
| V | 0.37 | 0.39 |
| W | 2.80 | 2.82 |

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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|---------------------|--------------------------------|--|------|-------|------|
| BV _{DSS} | Drain-Source Breakdown Voltage | V _{GS} =0V; I _D = -250 μ A | -60 | | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} =V _{GS} ; I _D = -250 μ A | -2.1 | -4 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = -10V; I _D = -64A | | 23 | mΩ |
| I _{GSS} | Gate-Source Leakage Current | V _{GS} = ±20V; V _{DS} = 0V | | ± 100 | nA |
| I _{DSS} | Drain-Source Leakage Current | V _{DS} = -60V; V _{GS} = 0V | | -1 | μ A |
| V _{SD} | Diode forward voltage | I _S = -80A, V _{GS} = 0V | | -1.6 | V |

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