

用途：用于高功率 DC/DC 转换和功率开关。

Purpose: These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

特点：低栅电荷, 低反馈电容, 开关速度快。

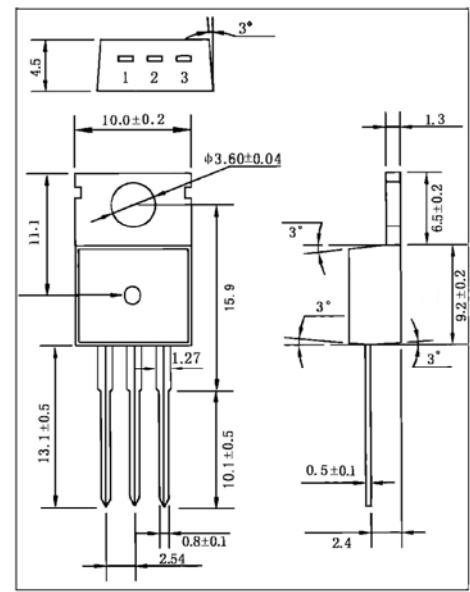
Features: Low gate charge, low crss, fast switching.

极限参数/Absolute maximum ratings (Ta=25°C)

| 参数符号<br>Symbol   | 数值<br>Rating | 单位<br>Unit |
|------------------|--------------|------------|
| $V_{DSS}$        | 75           | V          |
| $I_D$ (Tc=25°C)  | 75           | A          |
| $I_D$ (Tc=100°C) | 47.7         | A          |
| $I_{DM}$         | 300          | A          |
| $V_{GSS}$        | ±20          | V          |
| $E_{AS}$         | 1164         | mJ         |
| $E_{AR}$         | 13.1         | mJ         |
| $I_{AR}$         | 75           | A          |
| $P_D$ (Tc=25°C)  | 131          | W          |
| $T_J, T_{STG}$   | -55 to 150   | °C         |

T0-220

单位 :mm



引脚: 1 G 2 D 3 S

电性能参数/Electrical Characteristics (Ta=25°C)

| 参数符号<br>Symbol | 测试条件<br>Test Conditions                  |                   | 最小值<br>Min | 典型值<br>Typ | 最大值<br>Max | 单位<br>Unit |
|----------------|------------------------------------------|-------------------|------------|------------|------------|------------|
| $BV_{DSS}$     | $V_{GS}=0V$                              | $I_D=250 \mu A$   | 75         |            |            | V          |
| $I_{DSS}$      | $V_{DS}=75V$                             | $V_{GS}=0V$       |            |            | 1          | $\mu A$    |
|                | $V_{DS}=60V$                             | $T_C=125^\circ C$ |            |            | 10         | $\mu A$    |
| $I_{GSS}$      | $V_{GS}=\pm 20V$                         | $V_{DS}=0V$       |            |            | ±0.1       | $\mu A$    |
| $V_{GS(th)}$   | $V_{DS}=V_{GS}$                          | $I_D=250 \mu A$   | 2          |            | 4          | V          |
| $R_{DS(on)}$   | $V_{GS}=10V$                             | $I_D=37.5A$       |            | 9.5        | 11         | mΩ         |
| $g_{FS}$       | $V_{DS}=40V$                             | $I_D=37.5A$       |            | 15         |            | S          |
| $V_{SD}$       | $V_{GS}=0V$                              | $I_S=75A$         |            |            | 1.4        | V          |
| $C_{iss}$      | $V_{DS}=25V$ $V_{GS}=0V$ $f=1MHz$        |                   |            | 2940       | 3820       | pF         |
| $C_{oss}$      |                                          |                   |            | 680        | 890        | pF         |
| $C_{rSS}$      |                                          |                   |            | 85         | 125        | pF         |
| $t_{d(on)}$    | $V_{DD}=37.5V$ $I_D=75A$ $R_G=25 \Omega$ |                   |            | 7.2        | 25         | ns         |
| $t_r$          |                                          |                   |            | 68         | 146        | ns         |
| $t_{d(off)}$   |                                          |                   |            | 77         | 164        | ns         |
| $t_f$          |                                          |                   |            | 93         | 196        | ns         |

BR75N08 (CS75N08)

