

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **LTE21015R** is Designed for Class A Common Emitter Amplifier Applications to 2.3 GHz.

**FEATURES INCLUDE:**

- Replacement for Philips **LTE21015R**
- Gold Metalization
- Emitter Ballasting

**MAXIMUM RATINGS**

|                         |                                |
|-------------------------|--------------------------------|
| <b>I<sub>C</sub></b>    | 800 mA                         |
| <b>V<sub>CB</sub></b>   | 45 V                           |
| <b>P<sub>DISS</sub></b> | 6.0 W @ T <sub>C</sub> = 25 °C |
| <b>T<sub>J</sub></b>    | -55 °C to +200 °C              |
| <b>T<sub>STG</sub></b>  | -55 °C to +200 °C              |
| <b>q<sub>JC</sub></b>   | 15 °C/W                        |

**PACKAGE STYLE .250 2L FLG**

| Dim: | Inches |       | Millimeters |       |
|------|--------|-------|-------------|-------|
|      | Min    | Max   | Min         | Max   |
| A    | 0.790  | 0.810 | 20.07       | 20.57 |
| B    | 0.240  | 0.260 | 6.10        | 6.60  |
| C    | 0.144  | 0.170 | 3.66        | 4.31  |
| D    | 0.115  | 0.125 | 2.93        | 3.17  |
| E    | 0.055  | 0.065 | 1.40        | 1.65  |
| F    | 0.045  | 0.055 | 1.15        | 1.39  |
| H    | 0.115  | 0.135 | 2.93        | 3.42  |
| J    | 0.003  | 0.006 | 0.08        | 0.15  |
| K    | 0.225  | 0.275 | 5.72        | 6.98  |
| N    | 0.220  | 0.240 | 5.59        | 6.09  |
| Q    | 0.125  | 0.135 | 3.18        | 3.42  |
| U    | 0.552  | 0.572 | 14.03       | 14.52 |

1 = BASE    2 = COLLECTOR  
3 = EMITTER

ORDER CODE: ASI10473

**CHARACTERISTICS** T<sub>C</sub> = 25 °C

| SYMBOL   | TEST CONDITIONS  | MINIMUM | TYPICAL    | MAXIMUM | UNITS                 |
|--|--|---------|------------|---------|-----------------------|
| <b>BV<sub>CBO</sub></b>                        | I <sub>C</sub> = 2.0 mA  | 45      |            |         | <b>V</b>              |
| <b>BV<sub>CEO</sub></b>                        | I <sub>C</sub> = 20 mA   | 22      |            |         | <b>V</b>              |
| <b>BV<sub>EBO</sub></b>                        | I <sub>E</sub> = 2.0 mA  | 3.5     |            |         | <b>V</b>              |
| <b>h<sub>FE</sub></b>                          | V <sub>CE</sub> = 5.0 V    I <sub>C</sub> = 200 mA               | 20      |            |         | <b>---</b>            |
| <b>C<sub>ob</sub></b>                          | V <sub>CB</sub> = 28 V    f = 1.0 MHz                            |         | 5.0        |         | <b>pF</b>             |
| <b>P<sub>g</sub></b><br><b>P<sub>1db</sub></b> | V <sub>CE</sub> = 15 V    I <sub>C</sub> = 250 mA    f = 2.1 GHz | 1.5     | 7.8<br>1.7 |         | <b>dB</b><br><b>W</b> |