

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **TPV375** is a Common Emitter Device Designed for Class A Television Band III Applications.

FEATURES INCLUDE:

- Gold Metalization
- Emitter Ballasting

MAXIMUM RATINGS

| | |
|-------------------------|--------------------------------|
| I_C | 8 A |
| V_{CB} | 65 V |
| P_{DISS} | 140 W @ T _C = 25 °C |
| T_J | -65 °C to +200 °C |
| T_{STG} | -65 °C to +150 °C |
| q_{JC} | 1.5 °C/W |

PACKAGE STYLE .500 4L STUD

1 = COLLECTOR 2 & 4 = EMITTER
3 = BASE

| | MINIMUM Inches/mm | MAXIMUM Inches/mm |
|---|----------------------|----------------------|
| A | 1.010/25,65 | 1.050/26,67 |
| B | .220/5,59 | .230/5,84 |
| C | .495/12,57 | .505/12,83 |
| D | .003/0,08 | .007/0,18 |
| E | .160/4,06 | .180/4,57 |
| F | .622/15,80 | |
| G | .100/2,54 | .130/3,31 |
| H | .415/10,54 | .425/10,80 |
| I | .720/18,29 | |
| J | .250/6,35 | .290/7,37 |

ORDER CODE: ASI10760

CHARACTERISTICS T_C = 25 °C

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-------------------------|---|--------------------------------|---------|---------|------------|
| BV_{CEO} | I _C = 50 mA | 35 | | | V |
| BV_{CER} | I _C = 50 mA R _{BE} = 10 Ω | 60 | | | V |
| BV_{CBO} | I _C = 50 mA | 65 | | | V |
| BV_{EBO} | I _E = 10 mA | 4.0 | | | V |
| h_{FE} | V _{CE} = 5.0 V I _C = 1.0 A | 20 | | 120 | --- |
| C_{ob} | V _{CB} = 30 V f = 1.0 MHz | | | 85 | pF |
| G_{PE} | V _{CE} = 28 V I _C = 2.5 A P _{out} = 20 W | 8.0 | 9.0 | | --- |
| y | f = 225 MHz VSWR = ∞:1 | NO DEGRADATION IN OUTPUT POWER | | | |
| IMD₃ | V _{CE} = 28 V I _C = 2.5 A P _{ref} = 14 W f = 225 MHz Vision = -8.0 dB Snd. = -7.0 dB SB = -16 dB | | | -55 | dB |



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