| mult [®] comp | ALL RIGHTS RESERVED. NO PORTION OF THIS PUBLICATION, WHETHER IN WHOLE OR IN PART CAN BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF SPC TECHNOLOGY. | | | REVISIONS | DOC. NO. SPC-F005 * Effective: 7/8/02 * DCP No: 1398 | | | | | |
|------------------------|--|-------|-----|----------------------------|--|----------|--------|---------|--------|---------|
| | | DCP # | REV | DESCRIPTION | DRAWN | DATE | CHECKD | DATE | APPRVD | DATE |
| | | 1447 | Α | Released | JWM | 1/6/03 | но | 3/26/04 | JC | 4/13/04 |
| | SPC-F005.DWG | 1885 | В | UPDATED TO ROHS COMPLIANCE | EO | 02/03/06 | но | 2/6/06 | HO | 2/6/06 |

Description: A silicon NPN transistor in a TO-3 type case designed for for use in industrial power amplifier and switching circuit applications. RoHS

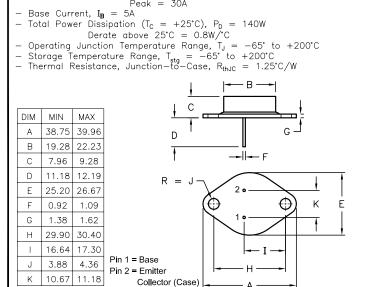
- Features:
- High Collector-Emitter Sustaining Voltage High DC Current Gain _
- _
- Low collector-Emitter Saturation Voltage - Fast switching times

- _ Collector Current, I_{C}

Continuous = 20A Peak = 30A

- _
- _

- _
- _





3 Collector 2 Base 1 Emitter

Electrical Characteristics: ($T_A = +25^{\circ}C$ unless otherwise specified)

| Parameter | | Test Conditions | Min | Max | Uni |
|--------------------------------------|-----------------------|--|-----|-----|-----|
| OFF Characteristics | | | | | |
| Collector-Emitter Sustaining Voltage | V _{CEO(sus)} | I_{C} = 200mA, I_{B} = 0, Note 1 | 90 | - | V |
| Collector Cut-Off Current | I _{CEX} | $V_{CE} = 140V$, $V_{BE(off)} = 1.5V$ | - | 50 | mA |
| | | $V_{CE} = 100V, V_{BE(off)} = 1.5V, T_{C} = +150^{\circ}C$ | - | 10 | mA |
| Emitter Cut-Off Current | I _{EBO} | $V_{BE} = 5V, I_{C} = 0$ | - | 5 | mA |
| ON Characteristics (Note 1) | | • | | | |
| DC Current Gain | h _{FE} | $V_{CE} = 5V, I_C = 12A$ | 20 | 100 | - |
| Collector-Emitter Saturation Voltage | V _{CE(sat)} | I _C = 20A, I _B = 5A | - | 2.5 | V |
| Base-Emitter Saturation Voltage | V _{BE(sat)} | $I_{C} = 20A, I_{B} = 5A$ | - | 3.3 | V |
| Switching Characteristics | | | | | |
| Rise Time | tr | | - | .5 | us |
| Storage Time | ts | $V_{CC} = 30V, I_C = 12A, I_{B1} = I_{B2} = 1.2A$ | - | 1.5 | μs |
| Fall Time | t _f | | - | .5 | μs |

| | TOLERANCES: | DRAWN BY: | DATE: | DRAW | ING TITLE: | | | | | |
|--|---|---------------|---------|---------------------------------------|------------|---------------------|-----|-------------|-----|--|
| | UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY. | Jeff McVicker | 1/6/03 | Transistor, Bipolar, Metal, TO—3, NPN | | | | | | |
| | | CHECKED BY: | DATE: | SIZE | DWG. NO. | TRONIC FILE | REV | | | |
| | | Hisham Odish | 3/26/04 | A | 2N; | 15038 3! | | 35C0719.DWG | | |
| | | APPROVED BY: | DATE: | | | | | | · | |
| | | John cole | 4/13/04 | SCALE: NTS | | U.O.M.: Millimeters | | SHEET: 1 OF | · 1 | |



Compliant

