

M.C.C.

Micro Commercial Components



Micro Commercial Components
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2SC2712-O
2SC2712-Y
2SC2712-GR
2SC2712-BL

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Complementary to 2SA1162
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

| Symbol | Rating | Rating | Unit |
|------------------|-----------------------------|-------------|------|
| V _{CEO} | Collector-Emitter Voltage | 50 | V |
| V _{CBO} | Collector-Base Voltage | 60 | V |
| V _{EBO} | Emitter-Base Voltage | 5.0 | V |
| I _C | Collector Current | 150 | mA |
| P _C | Collector power dissipation | 150 | mW |
| T _J | Junction Temperature | -55 to +150 | °C |
| T _{STG} | Storage Temperature | -55 to +150 | °C |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Typ | Max | Units |
|--------|-----------|-----|-----|-----|-------|
|--------|-----------|-----|-----|-----|-------|

OFF CHARACTERISTICS

| | | | | | |
|------------------|---|-----|-----|-----|----|
| I _{CBO} | Collector Cutoff Current (V _{CB} =60Vdc, I _E =0) | --- | --- | 0.1 | μA |
| I _{EBO} | Emitter Cutoff Current (V _{EB} =5.0Vdc, I _C =0) | --- | --- | 0.1 | μA |

ON CHARACTERISTICS

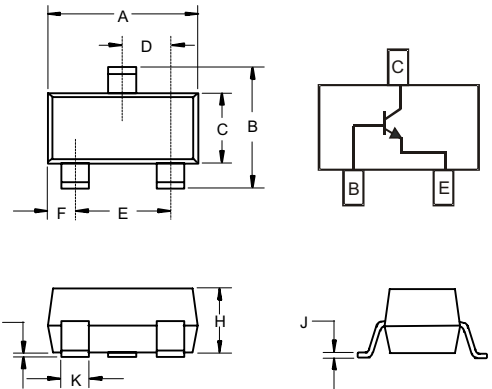
| | | | | | |
|----------------------|--|-----|-----|------|-----|
| V _{(BR)CEO} | Collector-Emitter Breakdown Voltage (I _C =1mA, I _B =0) | 50 | --- | --- | V |
| V _{(BR)CBO} | Collector-Base Breakdown Voltage (I _C =100μA, I _E =0) | 60 | --- | --- | V |
| V _{(BR)EBO} | Emitter-Base Breakdown Voltage (I _E =100μA, I _C =0) | 5.0 | --- | --- | V |
| h _F | DC Current Gain* (I _C =2mAdc, V _{CE} =6.0Vdc) | 70 | --- | 700 | --- |
| V _{CE(sat)} | Collector Saturation Voltage* (I _C =100mAdc, I _B =10mAdc) | --- | 0.1 | 0.25 | V |
| C _{ob} | Output Capacitance (V _{CB} =10V, I _E =0, f=1MHz) | --- | 2.0 | 3.5 | pF |
| f _T | Gain Bandwidth product (V _{CE} =10Vdc, I _C =1mAdc) | 80 | --- | --- | MHz |
| NF | Noise Figure (V _{CE} =6V, I _C =0.1mA, f=1KHz, R _g =10KΩ) | --- | 1.0 | 10 | dB |

CLASSIFICATION OF h_{FE}

| Rank | O | Y | GR | BL |
|---------|--------|---------|---------|---------|
| Range | 70-140 | 120-240 | 200-400 | 350-700 |
| Marking | LO | LY | LG | LL |

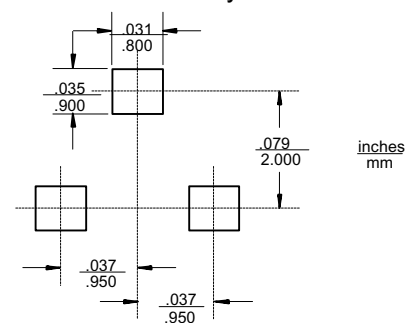
NPN Plastic-Encapsulate Transistors

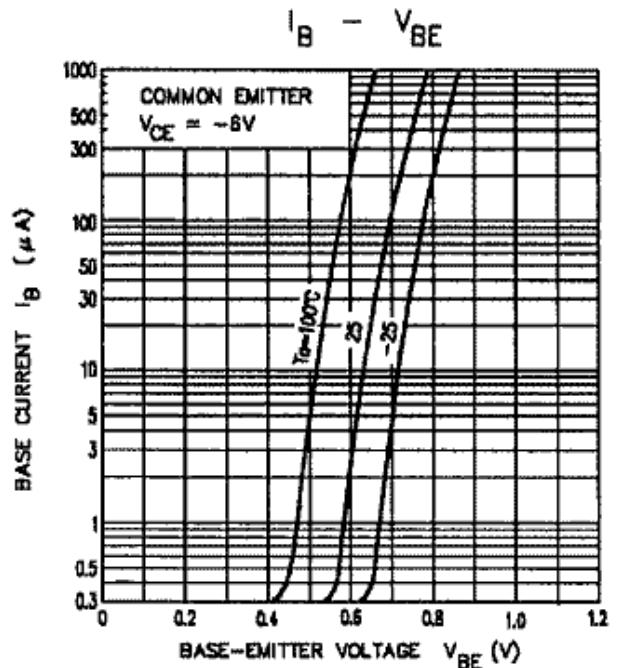
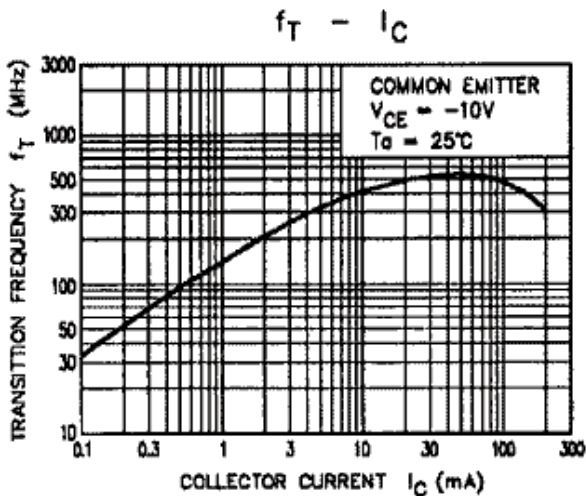
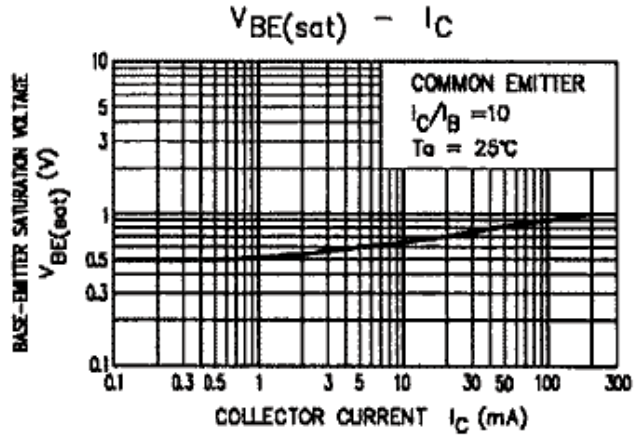
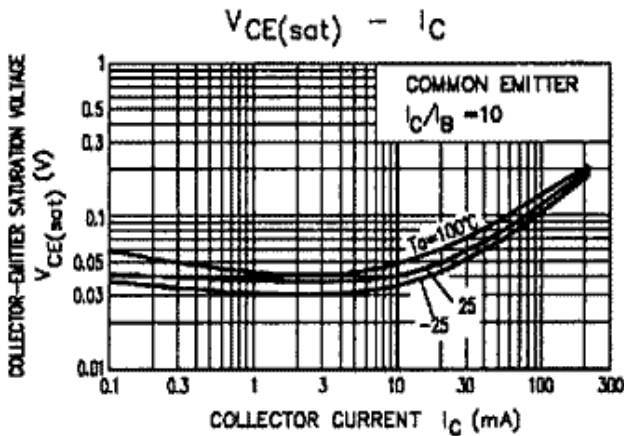
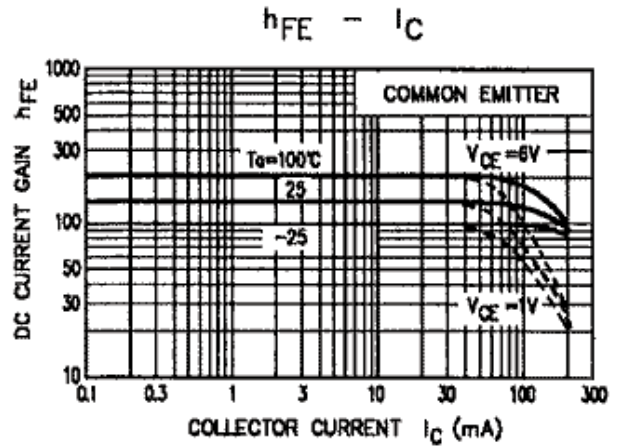
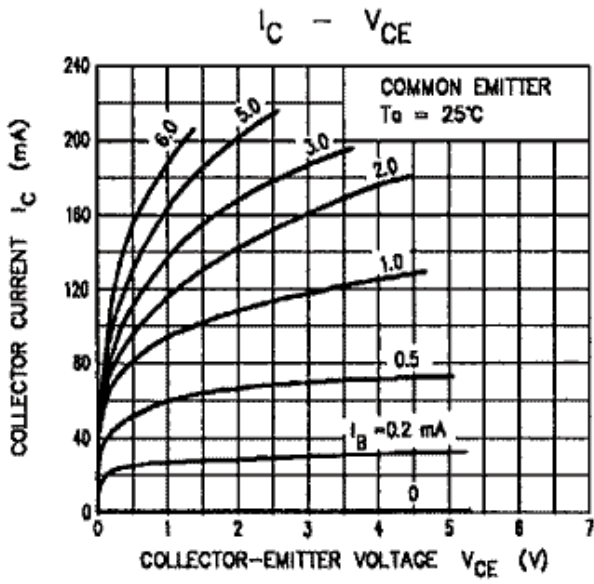
SOT-23



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|-------|------|------|------|
| | INCHES | | MM | | |
| A | .110 | .120 | 2.80 | 3.04 | |
| B | .083 | .098 | 2.10 | 2.64 | |
| C | .047 | .055 | 1.20 | 1.40 | |
| D | .035 | .041 | .89 | 1.03 | |
| E | .070 | .081 | 1.78 | 2.05 | |
| F | .018 | .024 | .45 | .60 | |
| G | .0005 | .0039 | .013 | .100 | |
| H | .035 | .044 | .89 | 1.12 | |
| J | .003 | .007 | .085 | .180 | |
| K | .015 | .020 | .37 | .51 | |

Suggested Solder Pad Layout







TM

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Ordering Information :

| Device | Packing |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel; 3Kpcs/Reel |

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