



KTC3876-Y KTC3876-GR

Features

- High h_{FE} and Low Noise
- Complementary to KTA1505
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

| Symbol | Rating | Rating | Unit |
|-----------|-----------------------------|-------------|------|
| V_{CEO} | Collector-Emitter Voltage | 30 | V |
| V_{CBO} | Collector-Base Voltage | 35 | V |
| V_{EBO} | Emitter-Base Voltage | 5.0 | V |
| I_C | Collector Current | 500 | mA |
| P_C | Collector power dissipation | 200 | 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-Base Cutoff Current ($V_{CB}=35V_{dc}, I_E=0$) | --- | --- | 0.1 | μA_{dc} |
| I_{EBO} | Emitter-Base Cutoff Current ($V_{EB}=5.0V_{dc}, I_C=0$) | --- | --- | 0.1 | μA_{dc} |

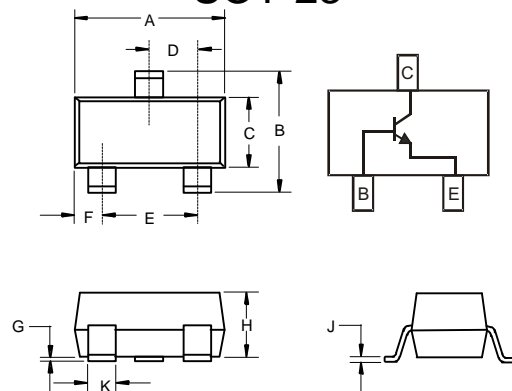
ON CHARACTERISTICS

| | | | | | |
|---------------|---|-----|-----|------|-----|
| h_{FE} | DC Current gain ⁽¹⁾ ($I_C=100mA_{dc}, V_{CE}=1.0V_{dc}$) | 120 | --- | 400 | --- |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage ($I_C=100mA_{dc}, I_B=10mA_{dc}$) | --- | --- | 0.25 | Vdc |
| V_{BE} | Base-Emitter Voltage ($V_{CE}=1.0V_{dc}, I_B=100mA_{dc}$) | --- | --- | 1.0 | Vdc |
| f_T | Transistor Frequency ($V_{CE}=6V_{dc}, I_C=20mA_{dc}$) | --- | 300 | --- | MHz |
| C_{ob} | Collector Output Capacitance ($V_{CB}=6V_{dc}, I_E=0, f=1.0MHz$) | --- | 2.0 | 3.5 | pF |

(1) h_{FE} Classification Y: 120~240(Marking: WY),
GR: 200~400(Marking: WG)

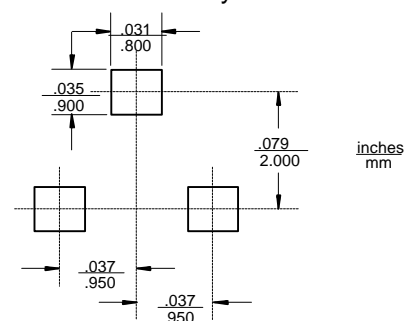
Epitaxial Planar NPN Transistors

SOT-23



| DIM | INCHES | | MM | | NOTE |
|-----|--------|-------|------|------|------|
| | MIN | MAX | MIN | MAX | |
| 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



Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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