



Micro Commercial Components



Micro Commercial Components
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2SA1020-O 2SA1020-Y

Features

- Halogen free available upon request by adding suffix "-HF"
- Collector of 0.9Watts of Power Dissipation.
- Collector-current -2.0A
- Operating and storage junction temperature range: -55°C to +150°C
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

Electrical Characteristics @ 25°C Unless Otherwise Specified

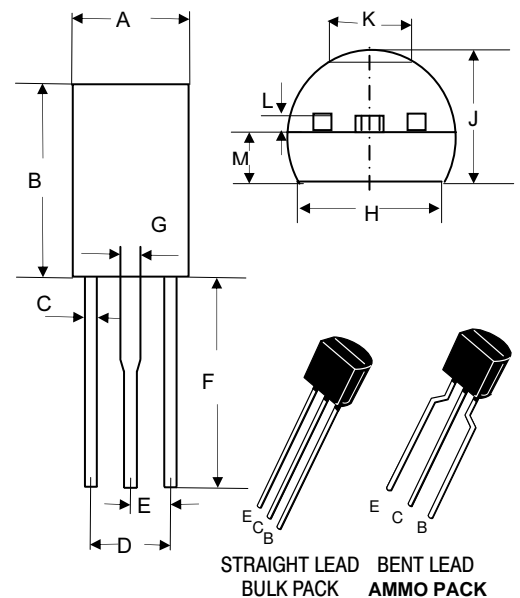
| Symbol | Parameter | Min | Max | Units |
|---------------|--|----------|------|---------|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage ($I_C=-10mA$, $I_B=0$) | -50 | --- | Vdc |
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage ($I_C=-100\mu A$, $I_E=0$) | -50 | --- | Vdc |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage ($I_E=-100mA$, $I_C=0$) | -5.0 | --- | Vdc |
| I_{CBO} | Collector Cutoff Current ($V_{CB}=-50Vdc$, $I_E=0$) | --- | -1.0 | μA |
| I_{EBO} | Emitter Cutoff Current ($V_{EB}=-5.0Vdc$, $I_C=0$) | --- | -1.0 | μA |
| $h_{FE(1)}$ | DC Current Gain ($I_C=-0.5Adc$, $V_{CE}=-2.0Vdc$) | 70 | 240 | --- |
| $h_{FE(2)}$ | DC Current Gain ($I_C=-1.5Adc$, $V_{CE}=-2.0Vdc$) | 40 | --- | --- |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage ($I_C=-1Adc$, $I_B=-50mA$) | --- | -0.5 | Vdc |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage ($I_C=-1.0Adc$, $I_B=-50mA$) | --- | -1.2 | Vdc |
| f_T | Transistor Frequency ($I_C=-500mA$, $V_{CE}=-2.0Vdc$) | 100(Typ) | | MHz |
| C_{ob} | Collector output capacitance ($I_E=0$, $V_{CB}=-10Vdc$, $f=1MHz$) | 40(Typ) | | pF |
| t_{on} | Turn-On time ($I_{B1}=-I_{B2}=-0.05$, $V_{CC}=-30Vdc$, $I_C=-1Adc$) | 0.1(Typ) | | μs |
| t_s | Storage time ($I_{B1}=-I_{B2}=-0.05$, $V_{CC}=-30Vdc$, $I_C=-1Adc$) | 1.0(Typ) | | μs |
| t_f | Fall time ($I_{B1}=-I_{B2}=-0.05$, $V_{CC}=-30Vdc$, $I_C=-1Adc$) | 0.1(Typ) | | μs |

CLASSIFICATION OF $h_{FE(1)}$

| Rank | O | Y |
|-------|--------|---------|
| Range | 70-140 | 120-240 |

PNP Plastic-Encapsulate Transistor

TO-92MOD



| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|-------|-------|---------------|
| | MIN | MAX | MIN | MAX | |
| A | .228 | .244 | 5.80 | 6.20 | |
| B | .331 | .346 | 8.40 | 8.80 | |
| C | .016 | .024 | 0.40 | 0.60 | |
| D | .114 | .122 | 2.90 | 3.10 | Straight Lead |
| | .173 | .220 | 4.40 | 5.60 | Bent Lead |
| E | .059 | | 1.50 | | Straight Lead |
| | .086 | .110 | 2.20 | 2.80 | Bent Lead |
| F | .543 | .559 | 13.80 | 14.20 | |
| G | .035 | .043 | 0.90 | 1.10 | |
| H | .157 | ---- | 4.00 | ---- | |
| J | .185 | .201 | 4.70 | 5.10 | |
| K | ---- | .063 | ---- | 1.60 | |
| L | .016 | .020 | 0.40 | 0.50 | |
| M | .068 | .080 | 1.73 | 2.03 | |

* For ammo packing detailed specification, click here to visit our website of product packaging for details.



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Ordering Information :

| Device | Packing |
|----------------|-----------------------------|
| Part Number-AP | Ammo Packing: 20Kpcs/Carton |
| Part Number-BP | Bulk: 50Kpcs/Carton |

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

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