



Micro Commercial Components

Micro Commercial Components
 20736 Marilla Street Chatsworth
 CA 91311
 Phone: (818) 701-4933
 Fax: (818) 701-4939

2SB1140
2SB1140-R
2SB1140-S

PNP
Plastic-Encapsulate
Transistors

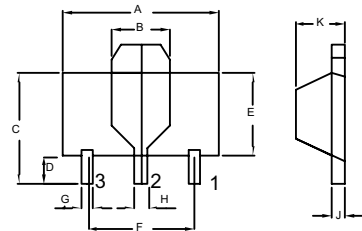
SOT-89

Features

- Power dissipation: $P_{CM} = 0.5W(T_{amb}=25^{\circ}C)$
- Collector current: $I_{CM} = -2A$
- Collector-base voltage: $V_{(BR)CBO} = -50V$
- Operating and storage junction temperature range
 $T_J, T_{stg}: -55^{\circ}C$ to $+150^{\circ}C$
- Case Material: Molded Plastic. UL Flammability
 Classification Rating 94V-0 and MSL Rating 1

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Typ | Max | Unit |
|---------------|--------------------------------------------------------------------|------|-----|------|---------|
| V_{CEO} | Collector-Emitter Breakdown Voltage ($I_C=-1000\mu A, I_B=0$) | -50 | --- | --- | V |
| V_{CBO} | Collector-Base Breakdown Voltage ($I_C=-10\mu A, I_E=0$) | -50 | --- | --- | V |
| V_{EBO} | Emitter-Base Voltage ($I_E=-10\mu A, I_C=0$) | -5.0 | --- | --- | V |
| I_{CBO} | Collector Cut-off Current ($V_{CB}=-50V, I_E=0$) | --- | --- | -1.0 | μA |
| I_{EBO} | Emitter Cut-off Current ($V_{EB}=-5V, I_C=0$) | --- | --- | -1.0 | μA |
| h_{FE1} | DC Current Gain ($V_{CE}=-2V, I_C=-0.2A$) | 120 | --- | 340 | --- |
| h_{FE2} | DC Current Gain ($V_{CE}=-2V, I_C=-1A$) | 60 | --- | --- | --- |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage ($I_C=-1A, I_B=-50mA$) | --- | --- | -0.3 | V |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage ($I_C=-1A, I_B=-50mA$) | --- | --- | -1.2 | V |
| f_T | Transition Frequency ($V_{CE}=-10Vdc, I_C=50mAdc, f=200MHz$) | --- | 80 | --- | MHz |
| C_{ob} | Collector output capacitance ($V_{CB}=-10V, I_E=0, f=1MHz$) | --- | --- | 80 | PF |



- 1.BASE
- 2.COLLECTOR
- 3.EMITTER

CLASSIFICATION OF h_{FE}

| Rank | R | S |
|---------|---------|---------|
| Range | 120-240 | 170-340 |
| Marking | 1L | |

| DIM | DIMENSINS | | | | NOTES |
|-----|-----------|------|------|------|-------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | .173 | .181 | 4.39 | 4.60 | |
| B | .063 | .071 | 1.60 | 1.80 | |
| C | .154 | .165 | 3.91 | 4.19 | |
| D | .031 | .039 | 0.80 | 1.00 | |
| E | .092 | .100 | 2.34 | 2.54 | |
| F | .118 | ---- | 3.00 | ---- | TYP |
| G | .013 | .019 | 0.33 | 0.48 | |
| H | .015 | .021 | 0.38 | 0.53 | |
| J | .015 | .016 | 0.38 | 0.41 | |
| K | .055 | .063 | 1.40 | 1.60 | |



Micro Commercial Components

Ordering Information

| | |
|------------------|----------------------|
| Device | Packing |
| (Part Number)-TP | Tape&Reel;1Kpcs/Reel |

IMPORTANT NOTICE

Micro Commercial Components Corp .reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes .
Micro Commercial Components Corp .does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp* .and all the companies whose products are represented on our website, harmless against all damages.

APPLICATIONS DISCLAIMER

Products offer by *Micro Commercial Components Corp* . are not intended for use in Medical, Aerospace or Military Applications.

www.mccsemi.com