



HM879

SILICON NPN EPITAXIAL TYPE TRANSISTOR

Description

For 1.5V And 3V Electronic Flash Use.

Features

- Charger-up time is about 1 mS faster than of a germanium transistor.
- Small saturation voltage can bring less power dissipation and flashing times.

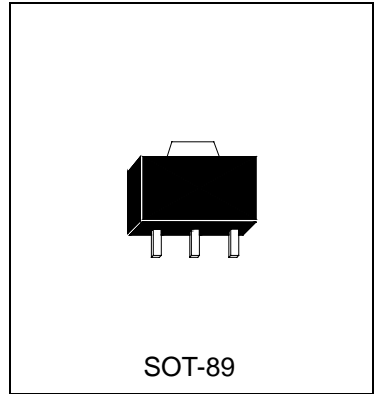
Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature -55 ~ +150 °C
Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
Total Power Dissipation (Ta=25°C) 1 W
- Maximum Voltages and Currents (Ta=25°C)
BVCBO Collector to Base Voltage 30 V
BVCEX Collector to Emitter Voltage 20 V
BVCEO Collector to Emitter Voltage 10 V
BVEBO Emitter to Base Voltage 6 V
IC Collector Current 3 A
IC Collector Current (Pluse) 5 A

Electrical Characteristics (Ta=25°C)

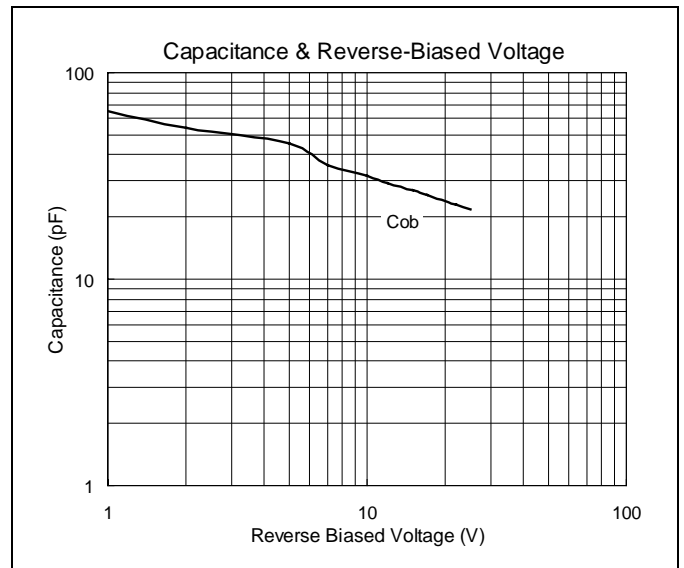
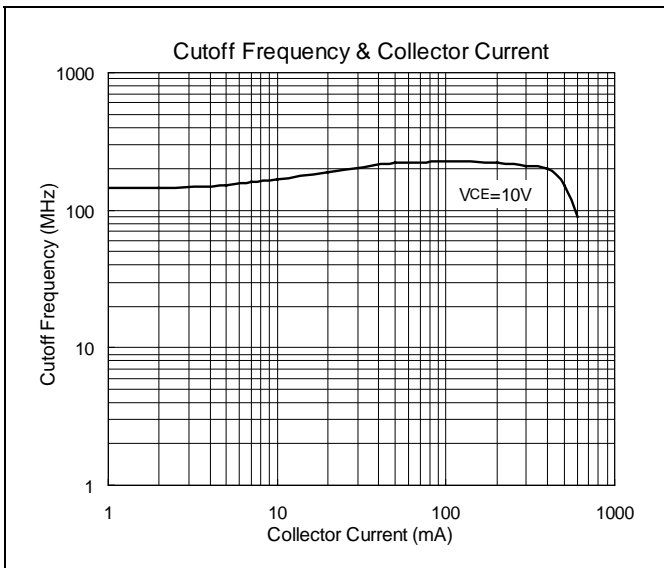
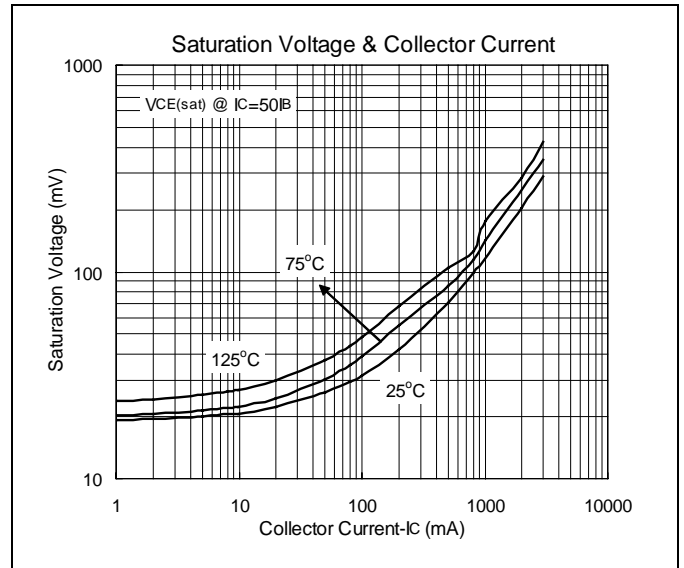
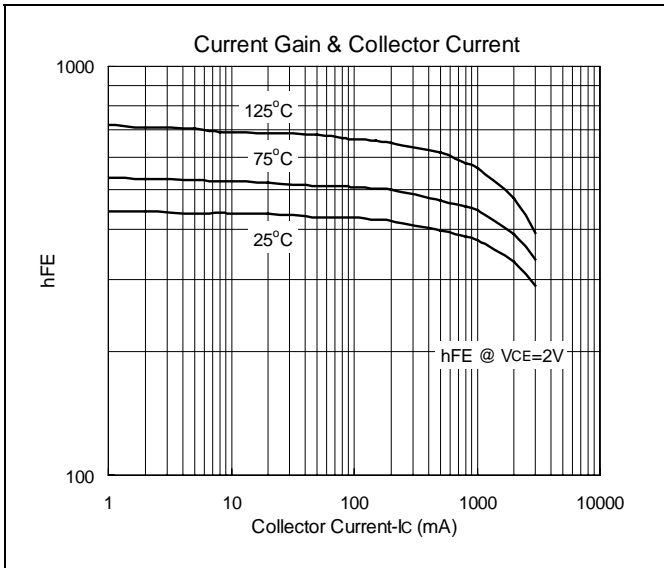
| Symbol | Min. | Typ. | Max. | Unit | Test Condition |
|-----------|------|------|------|------|------------------|
| BVCEO | 10 | - | - | V | IC=1mA |
| BVEBO | 6 | - | - | V | IE=10uA |
| BVCBO | 30 | - | - | V | IC=10uA |
| BVCEX | 20 | - | - | V | IC=1mA, VBE=3V |
| ICBO | - | - | 100 | nA | VCB=20V |
| IEBO | - | - | 100 | nA | VBE=4V |
| *VCE(sat) | - | 0.3 | 0.4 | V | IC=3A, IB=60mA |
| *hFE | 140 | 210 | 400 | | VCE=2V, IC=3A |
| fT | - | 200 | - | MHz | VCE=10V, IC=50mA |
| Cob | - | 30 | - | pF | VCB=10V, f=1MHz |

*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%



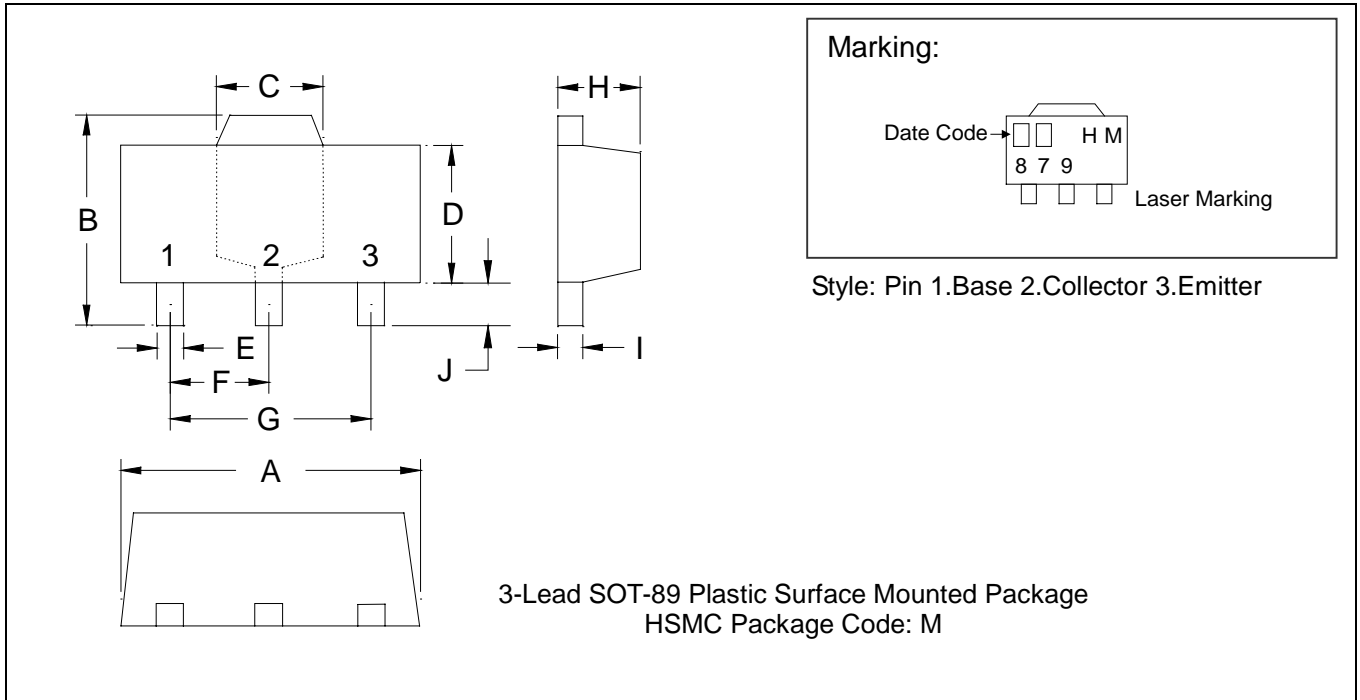


Characteristics Curve





SOT-89 Dimension



*: Typical

| DIM | Inches | | Millimeters | | DIM | Inches | | Millimeters | |
|-----|--------|--------|-------------|------|-----|--------|--------|-------------|------|
| | Min. | Max. | Min. | Max. | | Min. | Max. | Min. | Max. |
| A | 0.1732 | 0.1811 | 4.40 | 4.60 | F | 0.0583 | 0.0598 | 1.48 | 1.52 |
| B | 0.1594 | 0.1673 | 4.05 | 4.25 | G | 0.1165 | 0.1197 | 2.96 | 3.04 |
| C | 0.0591 | 0.0663 | 1.50 | 1.70 | H | 0.0551 | 0.0630 | 1.40 | 1.60 |
| D | 0.0945 | 0.1024 | 2.40 | 2.60 | I | 0.0138 | 0.0161 | 0.35 | 0.41 |
| E | 0.0141 | 0.0201 | 0.36 | 0.51 | J | 0.0319 | 0.0421 | 0.81 | 1.07 |

Notes: 1.Dimension and tolerance based on our Spec. dated May. 05,1996.
 2.Controlling dimension: millimeters.
 3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
 4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

Material:

- Lead: 42 Alloy; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

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