



HMPS8599

PNP SILICON TRANSISTOR

Description

HMPS8599 is designed for general purpose amplifier applications.

Features

- Low Collector-Emitter Saturation Voltage
- HMPS8599 is complementary to HMPS8099



Absolute Maximum Ratings

- Maximum Temperatures
 Storage Temperature -55 ~ +125 °C
 Junction Temperature +150 °C Maximum
- Maximum Power Dissipation
 Total Power Dissipation (Ta=25°C) 625 mW
- Maximum Voltages and Currents (Ta=25°C)
 VCBO Collector to Base Voltage -80 V
 VCES Collector to Emitter Voltage..... -80 V
 VEBO Emitter to Base Voltage -5 V
 IC Collector Current -500 mA

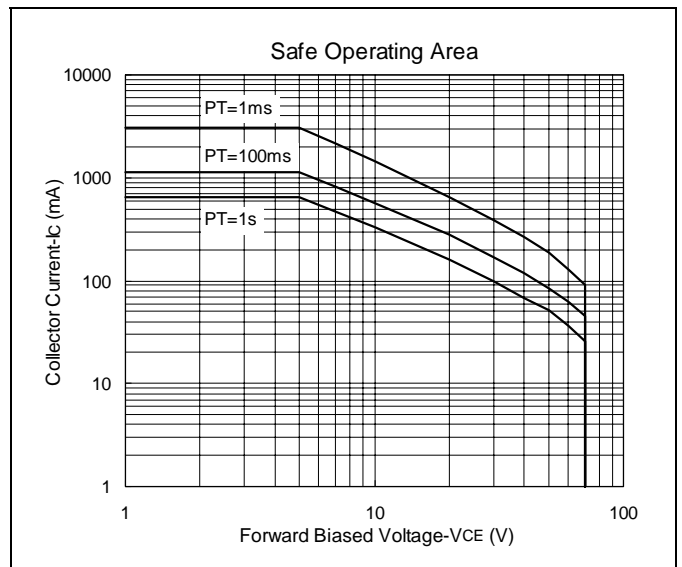
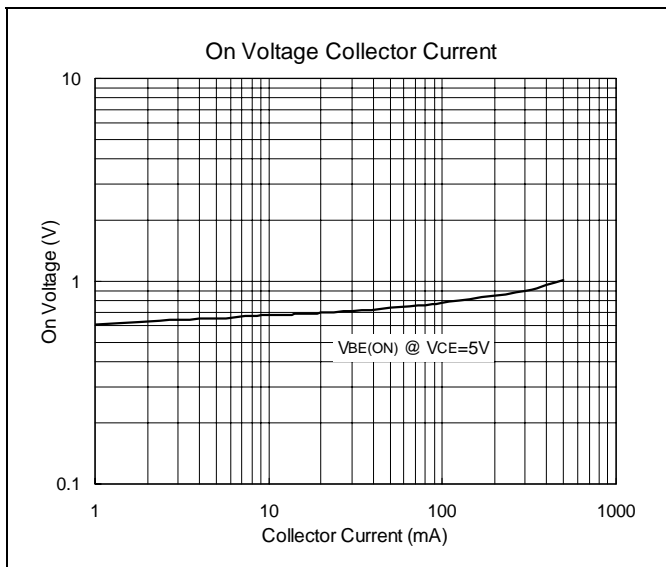
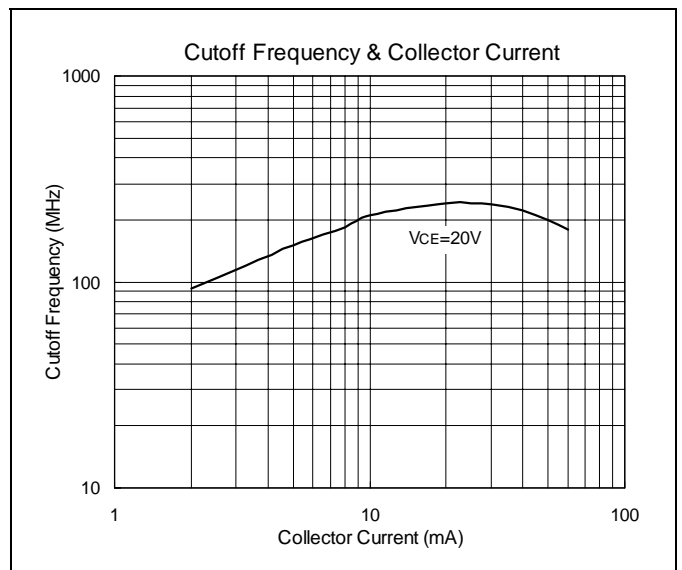
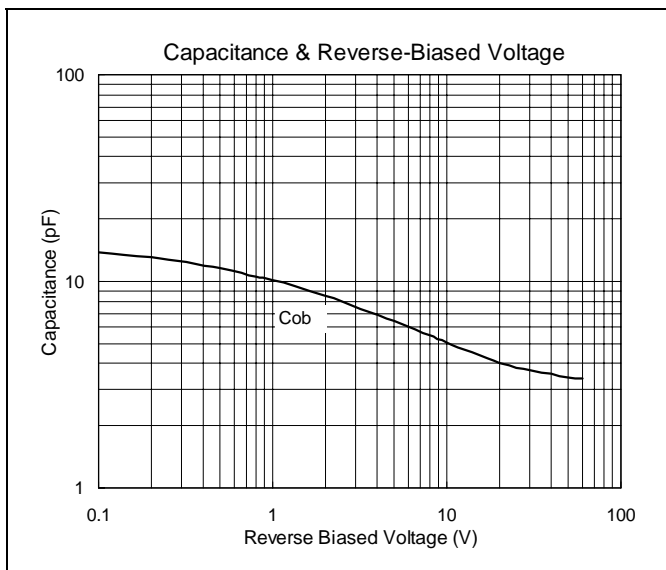
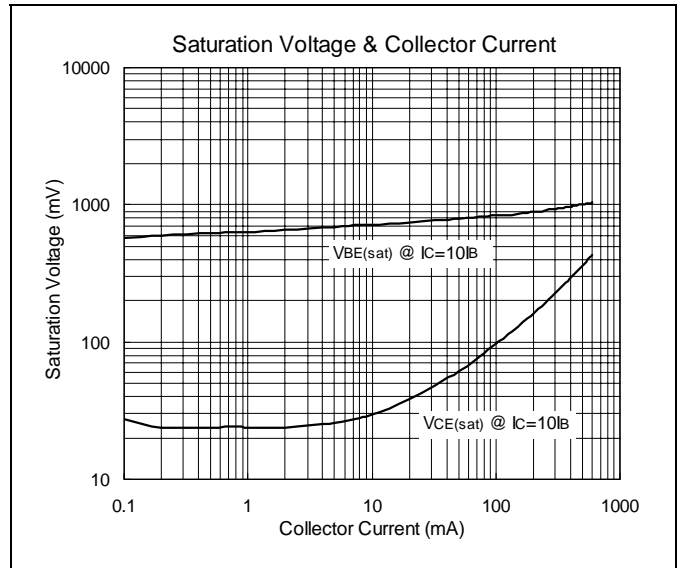
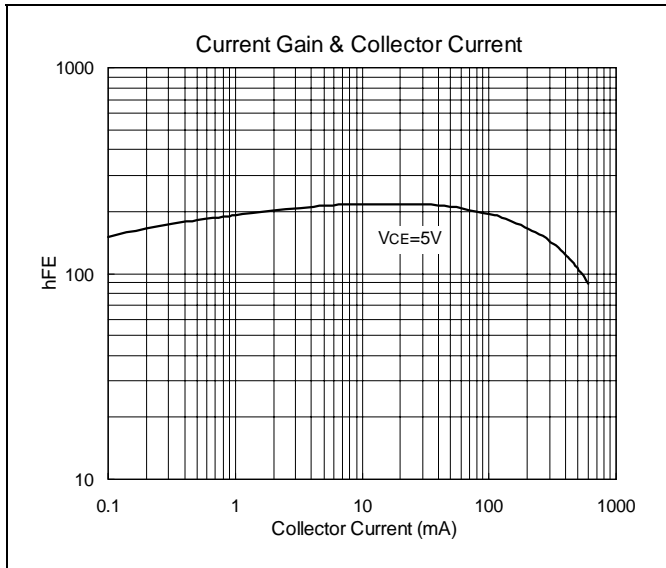
Characteristics (Ta=25°C)

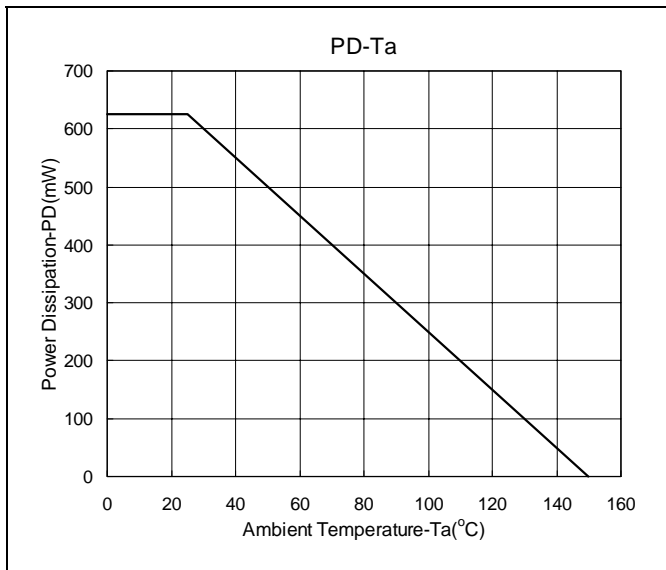
| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|------------|------|------|------|------|-----------------------------|
| BVCBO | -80 | - | - | V | IC=-100uA, IE=0 |
| BVCEO | -80 | - | - | V | IC=-10mA, IB=0 |
| BVEBO | -5 | - | - | V | IE=-10uA, IC=0 |
| ICBO | - | - | -100 | nA | VCB=-80V, IE=0 |
| IEBO | - | - | -100 | nA | VEB=-4V, IC=0 |
| ICEO | - | - | -100 | nA | VCE=-60V, IB=0 |
| *hFE1 | 100 | - | 300 | | IC=-1mA, VCE=-5V |
| *hFE2 | 100 | - | - | | IC=-10mA, VCE=-5V |
| *hFE3 | 75 | - | - | | IC=-100mA, VCE=-5V |
| *VCE(sat)1 | - | - | -0.4 | V | IC=-100mA, IB=-5mA |
| *VCE(sat)2 | - | - | -0.3 | V | IC=-100mA, IB=-10mA |
| VBE(on) | -0.6 | - | -0.8 | V | IC=-10mA, VCE=-5V |
| fT | 150 | - | - | MHz | VCE=-5V, IC=-10mA, f=100MHz |
| Cob | - | - | 8 | PF | VCB=-5V, IE=0, f=1MHz |

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



Characteristics Curve







TO-92 Dimension

3-Lead TO-92 Plastic Package
HSMC Package Code : A

Marking :

HSMC Logo → □ □ □ □ ← Product Series
 Part Number → □ □ □ □ □ □
 Date Code → □ □ □ □ □ □ ← Rank
 Laser Mark

HSMC Logo
 Product Series
 Part Number → □ □ □ □ □ □
 Ink Mark

Style : Pin 1. Emitter 2. Base 3. Collector

*:Typical

| DIM | Inches | | Millimeters | | DIM | Inches | | Millimeters | |
|-----|--------|---------|-------------|-------|-----|--------|---------|-------------|-------|
| | Min. | Max. | Min. | Max. | | Min. | Max. | Min. | Max. |
| A | 0.1704 | 0.1902 | 4.33 | 4.83 | G | 0.0142 | 0.0220 | 0.36 | 0.56 |
| B | 0.1704 | 0.1902 | 4.33 | 4.83 | H | - | *0.1000 | - | *2.54 |
| C | 0.5000 | - | 12.70 | - | I | - | *0.0500 | - | *1.27 |
| D | 0.0142 | 0.0220 | 0.36 | 0.56 | α1 | - | *5° | - | *5° |
| E | - | *0.0500 | - | *1.27 | α2 | - | *2° | - | *2° |
| F | 0.1323 | 0.1480 | 3.36 | 3.76 | α3 | - | *2° | - | *2° |

Notes : 1.Dimension and tolerance based on our Spec. dated Apr. 25,1996.
 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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