



# HSC2625

NPN EPITAXIAL PLANAR TRANSISTOR

## Description

The HSC2625 is designed for triple diffused planer type high voltage, high speed switching applications.

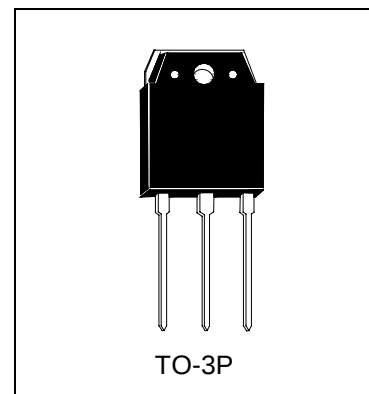
## Absolute Maximum Ratings (Ta=25°C)

- Maximum Temperatures  
Storage Temperature ..... -55 ~ +150 °C  
Junction Temperature..... +150 °C Maximum
- Maximum Power Dissipation  
Total Power Dissipation (Tc=25°C) ..... 80 W
- Maximum Voltages and Currents  
VCBO Collector to Base Voltage ..... 450 V  
VCEO Collector to Emitter Voltage..... 400 V  
VEBO Emitter to Base Voltage..... 7 V  
IC Collector Current ..... 10 A  
IB Base Current..... 3 A

## Characteristics (Ta=25°C)

| Symbol    | Min. | Typ. | Max. | Unit | Test Conditions |
|-----------|------|------|------|------|-----------------|
| BVCBO     | 450  | -    | -    | V    | IC=1mA          |
| BVCEO     | 400  | -    | -    | V    | IC=10mA         |
| BVEBO     | 7    | -    | -    |      | IE=100uA        |
| ICBO      | -    | -    | 1    | mA   | VCB=450V        |
| IEBO      | -    | -    | 100  | uA   | VEB=7V          |
| *VCE(sat) | -    | -    | 1.2  | V    | IC=4A, IB=800mA |
| *VBE(sat) | -    | -    | 1.5  | V    | IC=4A, IB=800mA |
| *hFE1     | 10   | -    | 30   |      | IC=0.5A, VCE=5V |
| *hFE2     | 6    | -    | -    |      | IC=4A, VCE=5V   |

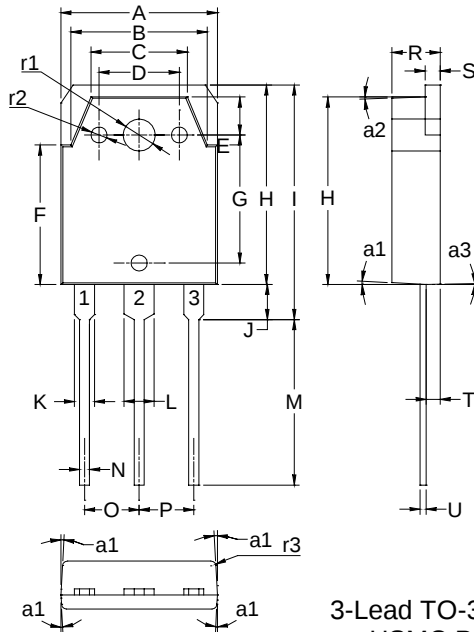
\*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%



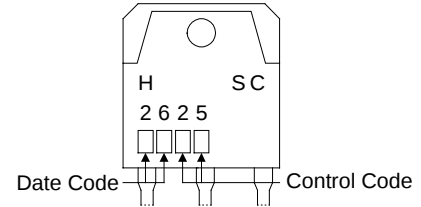
TO-3P



### TO-3P Dimension



#### Marking:



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

3-Lead TO-3P Plastic Package,  
HSMC Package Code: R

\*: Typical

| DIM | Inches |         | Millimeters |       | DIM | Inches |        | Millimeters |        |
|-----|--------|---------|-------------|-------|-----|--------|--------|-------------|--------|
|     | Min.   | Max.    | Min.        | Max.  |     | Min.   | Max.   | Min.        | Max.   |
| A   | 0.6063 | 0.6220  | 15.40       | 15.80 | N   | 0.0315 | 0.0472 | 0.80        | 1.20   |
| B   | 0.5276 | 0.5433  | 13.40       | 13.80 | O   | 0.2028 | 0.2264 | 5.15        | 5.75   |
| C   | 0.3701 | 0.3858  | 9.40        | 9.80  | P   | 0.2028 | 0.2264 | 5.15        | 5.75   |
| D   | -      | *0.3150 | -           | *8.00 | Q   | 0.7283 | 0.7441 | 18.50       | 18.90  |
| E   | 0.1417 | 0.1575  | 3.60        | 4.00  | R   | 0.1811 | 0.1969 | 4.60        | 5.00   |
| F   | 0.5394 | 0.5551  | 13.70       | 14.10 | S   | 0.0571 | 0.0650 | 1.45        | 1.65   |
| G   | 0.4945 | 0.5102  | 12.56       | 12.96 | T   | 0.0472 | 0.0630 | 1.20        | 1.60   |
| H   | 0.7756 | 0.7913  | 19.70       | 20.10 | a1  | -      | *3°    | -           | *3°    |
| I   | 0.9134 | 0.9291  | 23.20       | 23.60 | a2  | -      | *2°    | -           | *2°    |
| J   | 0.1299 | 0.1457  | 3.30        | 3.70  | a3  | -      | *1°    | -           | *1°    |
| K   | 0.0709 | 0.0866  | 1.80        | 2.20  | r1  | φ3.10  | φ3.30  | φ3.10       | φ3.30  |
| L   | 0.1102 | 0.1260  | 2.80        | 3.20  | r2  | -      | *φ1.60 | -           | *φ1.60 |
| M   | 0.6378 | 0.6614  | 16.20       | 16.80 | r3  | -      | *R0.50 | -           | *R0.50 |

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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