

2SC1473(A)

Rev.E Mar.-2016

/ Descriptions

TO-92 NPN Silicon NPN transistor in a TO-92 Plastic Package.

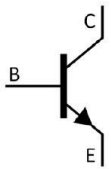
/ Features

f_T , 2SA1018(A)
High V_{CE0} , high f_T , Complementary pair with 2SA1018(A).

/ Applications

General amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ hFE Classifications & Marking

| h _{FE} Classifications Symbol | P | Q | R |
|---|--------|--------|---------|
| h _{FE} Range | 30~100 | 60~150 | 100~220 |

/ Absolute Maximum Ratings(Ta=25)

| Parameter | Symbol | | Rating | Unit |
|---------------------------------------|------------------|----------|---------|------|
| Collector to Base Voltage | V _{CBO} | 2SC1473 | 250 | V |
| | | 2SC1473A | 300 | |
| Collector to Emitter Voltage | V _{CEO} | 2SC1473 | 200 | V |
| | | 2SC1473A | 300 | |
| Emitter to Base Voltage | V _{EBO} | | 7.0 | V |
| Collector Current - Continuous | I _C | | 70 | mA |
| Collector Current – Continuous(Pulse) | I _{CP} | | 100 | mA |
| Collector Power Dissipation | P _C | | 750 | mW |
| Junction Temperature | T _j | | 150 | °C |
| Storage Temperature Range | T _{stg} | | -55~150 | °C |

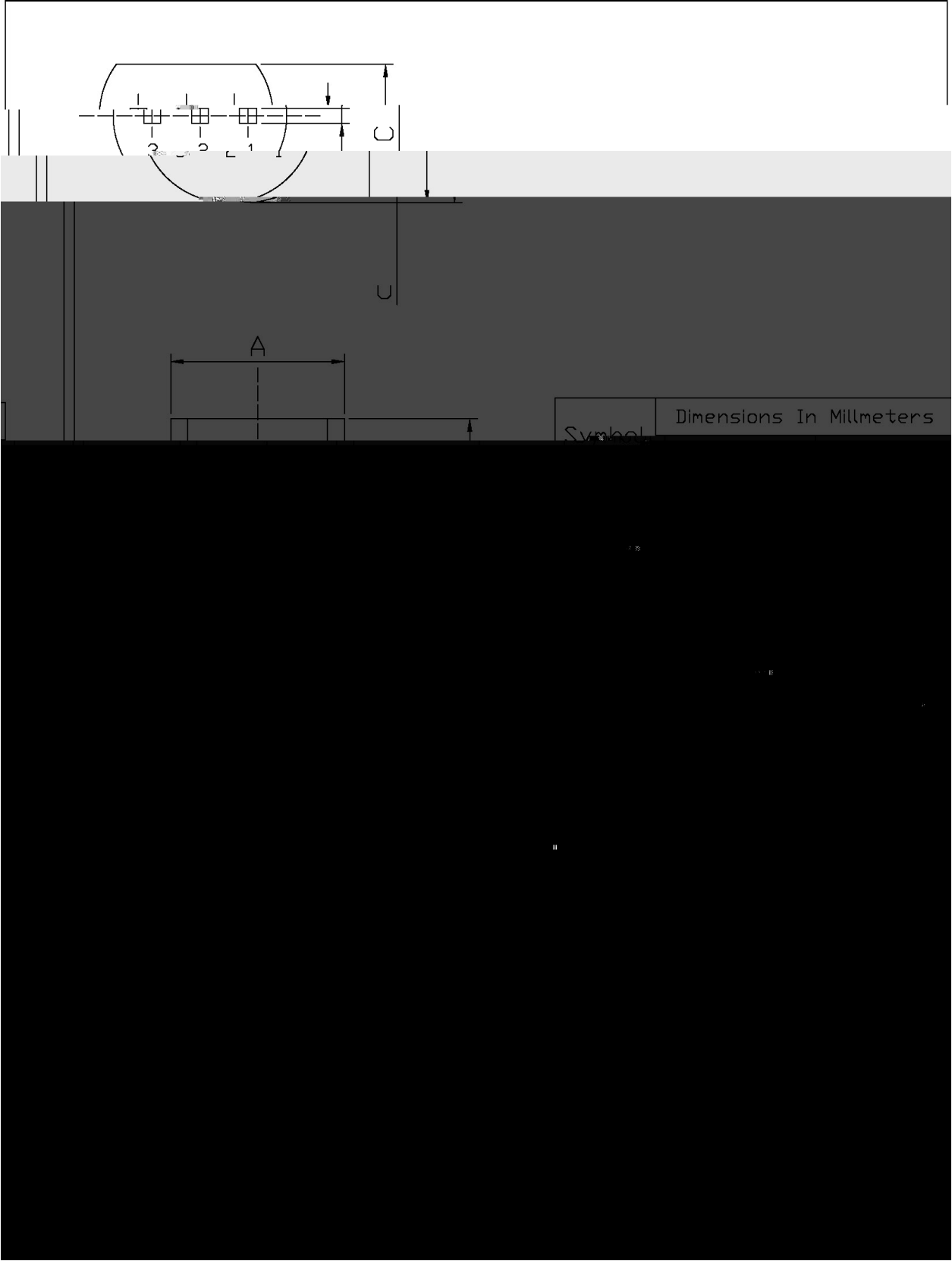
/ Electrical Characteristics(Ta=25)

| Parameter | Symbol | | Test Conditions | Min | Typ | Max | Unit |
|---|----------------------|----------|---|-----|-----|-----|------|
| Collector to Breakdown Emitter Voltage | V _{CEO} | 2SC1473 | I _C =100μA I _B =0 | 200 | | | V |
| | | 2SC1473A | | 300 | | | |
| Emitter to Base Breakdown Voltage | V _{EBO} | | I _E =1.0μA I _C =0 | 7.0 | | | V |
| Collector Cut-Off Current | I _{CEO} | | V _{CE} =120V I _B =0 | | | 1.0 | μA |
| DC Current Gain | h _{FE} | | V _{CE} =10V I _C =5.0mA | 30 | | 220 | |
| Collector to Emitter Saturation Voltage | V _{CE(sat)} | | I _C =50mA I _B =5.0mA | | | 1.5 | V |
| Transition Frequency | f _T | | V _{CE} =10V I _C =10mA | 50 | | | MHz |
| Collector Output Capacitance | C _{ob} | | V _{CB} =10V f=1.0MHz I _E =0 | | | 10 | pF |

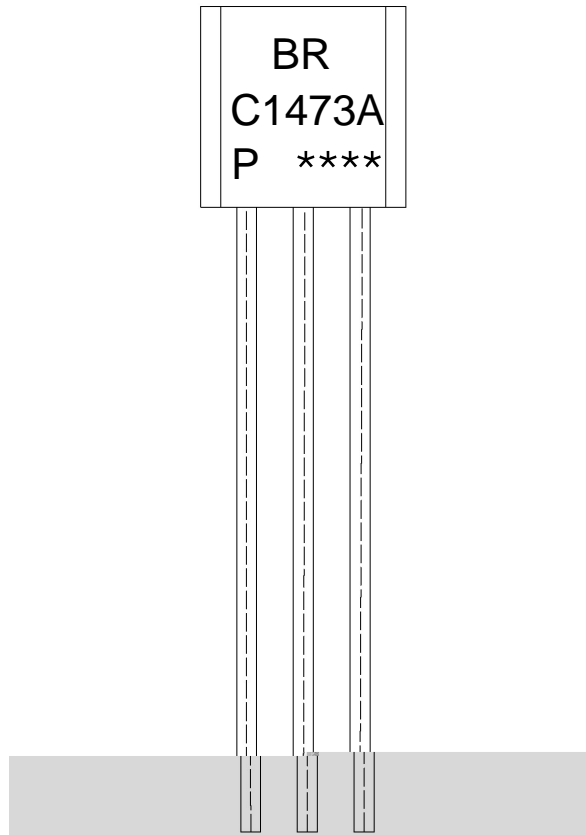
/ Package Dimensions

TO-92

Unit: mm



/ Marking Instructions



BR:

C1473A

P: h_{FE}

Note:

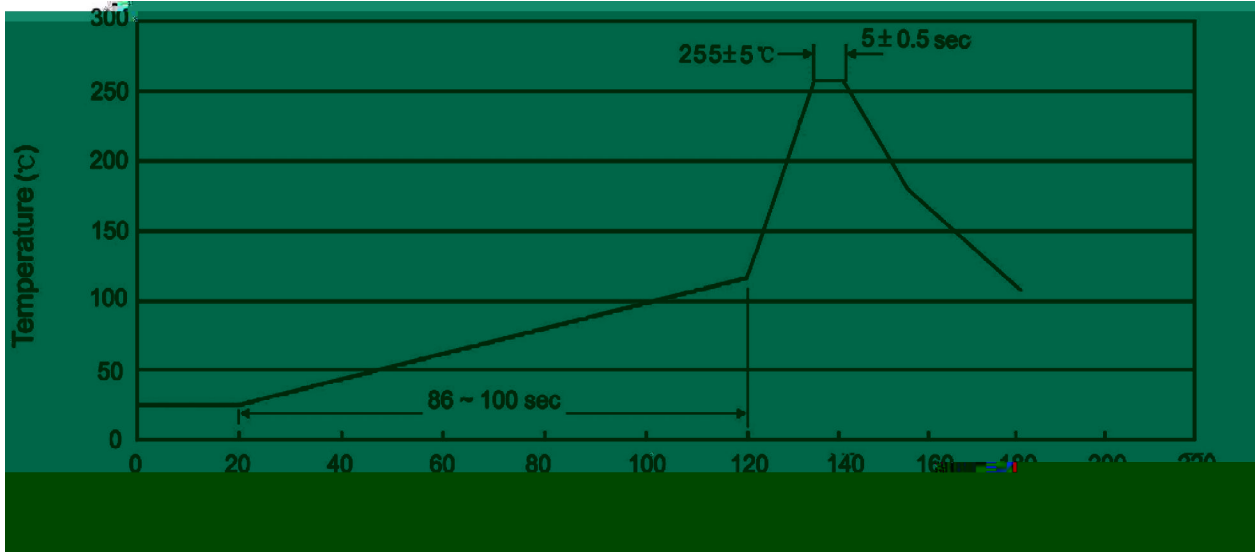
BR: Company Code.

C1473A: Product Type.

P: h_{FE} Classifications Symbol

****: Lot No. Code, code change with Lot No.

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-----------|----------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255±5 | | 5±0.5sec; | | 2.Peak Temp.:255±5 , Duration:5±0.5sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

| Package Type | Units | | | | | Dimension (unit mm3) | | |
|--------------|-------------|------------------|-------------------|-------------------------|-------------------|----------------------|-------------|-------------|
| | Units/Bag / | Bags/Inner Box / | Units/Inner Box / | Inner Boxes/Outer Box / | Units/Outer Box / | Bag | Inner Box | Outer Box |
| TO-92 | 1,000 | 10 | 10,000 | 5 | 50,000 | 135×190 | 237×172×102 | 560×245×195 |
| | 1,000 | 10 | 10,000 | 10 | 100,000 | 135×190 | 237×172×102 | 560×245×375 |

/ AMMO

| Package Type | Units | | | | | Dimension (unit mm3) | |
|--------------|--------------|------------------|------------------|-------------------------|-------------------|----------------------|----------------------------|
| | Units/tape / | Tape/Inner Box / | Rows/Inner Box / | Inner Boxes/Outer Box / | Units/Outer Box / | Inner Box | Outer Box |
| TO-92 | 3,000 | 1 | 120 | 10 | 30,000 | 328×230×42 | 480×346×235 547×407×268 |

/ Notices