

Micro Commercial Components



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

2SC2873-O

2SC2873-Y

NPN Silicon

Epitaxial Transistors

Features

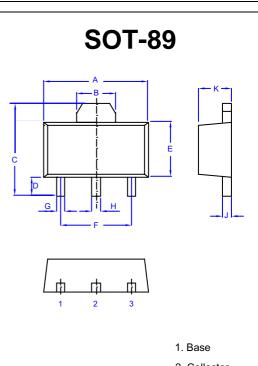
- Low saturation voltage
- High speed switching time
- Complementary to 2SA1213
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- •__ Moisure Sensitivity_Level 1

Maximum Ratings

| Symbol | Rating | Rating | Unit |
|------------------|-----------------------------|-------------|------|
| V _{CEO} | Collector-Emitter Voltage | 50 | V |
| V _{CBO} | Collector-Base Voltage | 50 | V |
| V _{EBO} | Emitter-Base Voltage | 5.0 | V |
| I _C | Collector Current | 2.0 | А |
| Pc | Collector power dissipation | 0.5 | W |
| TJ | Junction Temperature | 150 | °C |
| T _{STG} | Storage Temperature | -55 to +150 | °C |

Electrical Characteristics @ 25 $^{\circ}$ C Unless Otherwise Specified

| Symbol | Parameter | | | Тур | Max | Units | |
|----------------------|--|--|----|---------|------|-------|--|
| OFF CHARA | CTERISTICS | | | | | | |
| V _{(BR)CEO} | Collector-E (I _c =1mAc | mitter Breakdown Voltage lc, I _B =0) | 50 | | | Vdc | |
| V (BR)CBO | Collector-B (I _c =0.1mA | 50 | | | Vdc | | |
| V _{(BR)EBO} | Emitter-Bas (I _E =0.1mA | 5.0 | | | Vdc | | |
| I _{CBO} | Collector-B (V _{CB} =50V | | | 0.1 | uAdc | | |
| I _{EBO} | Emitter-Bas (V _{EB} =5.0) | | | 0.1 | uAdc | | |
| ON CHARA | CTERISTIC | | | | | | |
| h _{FE(1)} | DC Current (I _c =0.5Ac | 70 | | 240 | | | |
| h _{FE(2)} | DC Current (I _c =2.0Ac | 20 | | | | | |
| V _{CE(sat)} | Collector-E (I _c =1.0Ac | | | 0.5 | Vdc | | |
| V _{BE(sat)} | Base-Emitter Saturation Voltage (I _c =1.0Adc,I _B =0.05Adc) | | | | 1.2 | Vdc | |
| f _T | Transition Frequency (V _{cE} =2.0Vdc, I _c =0.5Adc) | | | 120 | | MHz | |
| C _{ob} | Collector output capacitance (V _{CB} =10Vdc,I _E =0, f=1.0MHz) | | | 30 | | pF | |
| CLASSIFIC | ATION OF H | E(1) | | | | | |
| Ra | ank | 0 | | Y | | | |
| | nge | 70-140 | | 120-240 | | | |
| Mar | king | MO | | MY | | | |



- 2. Collector
- 3. Emitter

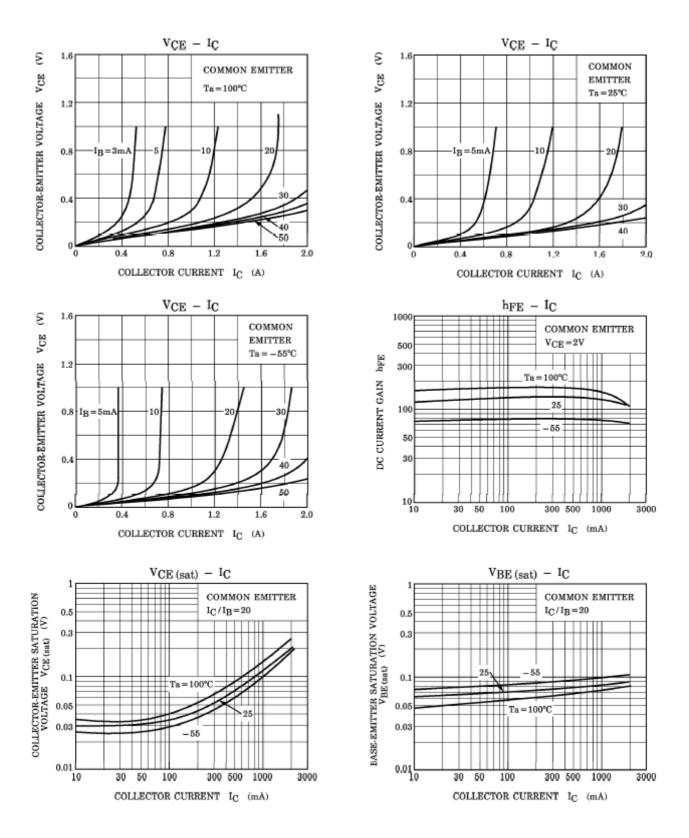
| DIMENSINS | | | | | |
|-----------|--------|------|------|------|-------|
| DIM | INCHES | | MM | | NOTES |
| | MIN | MAX | MIN | MAX | |
| А | .173 | .181 | 4.39 | 4.60 | |
| В | .063 | .071 | 1.60 | 1.80 | |
| С | .154 | .165 | 3.91 | 4.19 | |
| D | .031 | .039 | 0.80 | 1.00 | |
| Е | .092 | .100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

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2SC2873

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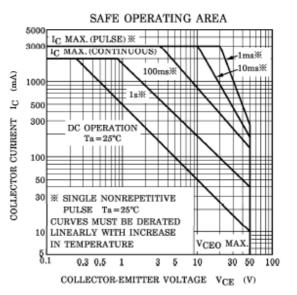


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IC - VBE2.0COMMON EMITTER ₹ VCE=2V 2 1.5 COLLECTOR CURRENT Ta=100°C 25 -55 1.0 0.5 0 L 0 0.4 0.8 1.2 1.6 2.0 BASE-EMITTER VOLTAGE VBE (V) PC - Ta 1.21) MOUTED ON CERAMIC SUBSTRATE (250mm²×0.8t) COLLECTOR POWER DISSIPATION PC (W) 1.0 Ta = 25°C Ð 8.0 0.6 2 0.4 0.2



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0 0

40

20

60

100

80 AMBIENT TEMPERATURE Ta (°C)

120

140 160



Ordering Information :

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

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