

KTA1277
Rev.F Mar.-2016

TO-92LM PNP Silicon PNP transistor in a TO-92LM Plastic Package.

High V_{CBO} , low $V_{CE(sat)}$, high speed switching.

DC-DC converter, low power switching regulator, high voltage application.

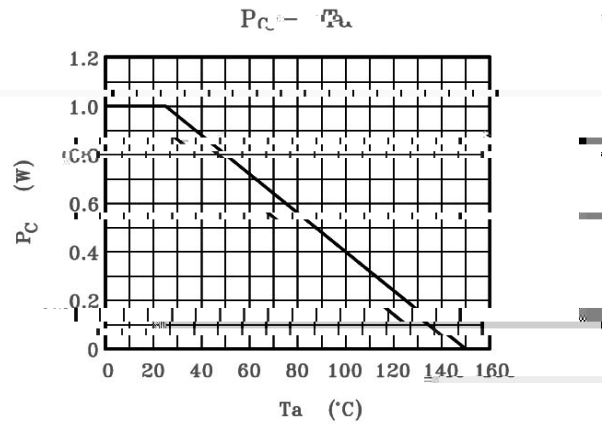
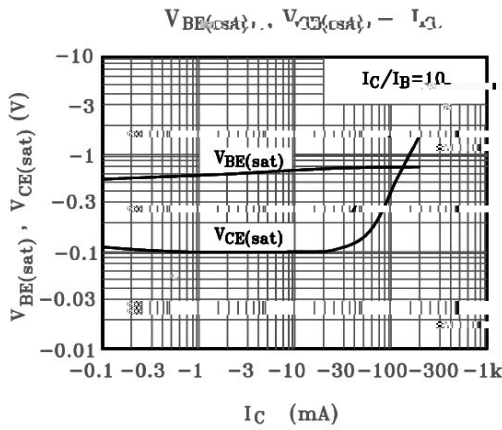
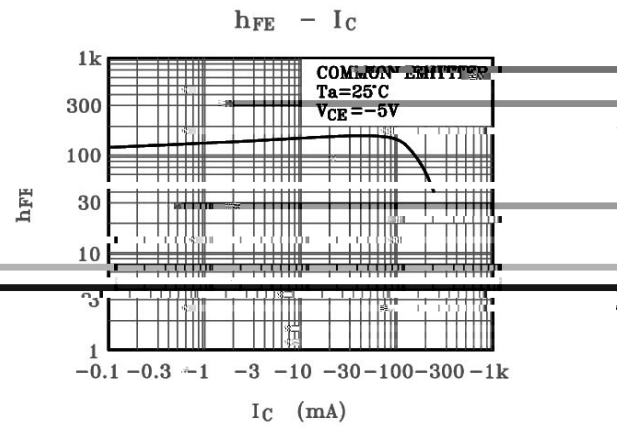
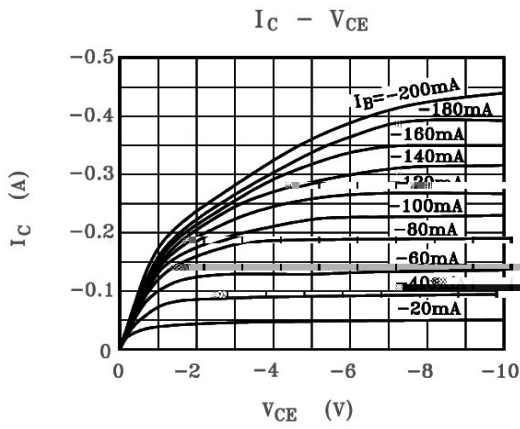
/ Absolute Maximum Ratings(Ta=25)

| Parameter | Symbol | Rating | Unit |
|--------------------------------|-----------|---------|------|
| Collector to Base Voltage | V_{CBO} | -400 | V |
| Collector to Emitter Voltage | V_{CEO} | -400 | V |
| Emitter to Base Voltage | V_{EBO} | -7.0 | V |
| Collector Current - Continuous | I_C | -500 | mA |
| Collector Power Dissipation | P_C | 1.0 | W |
| Junction Temperature | T_j | 150 | |
| Storage Temperature Range | T_{stg} | -55 150 | |

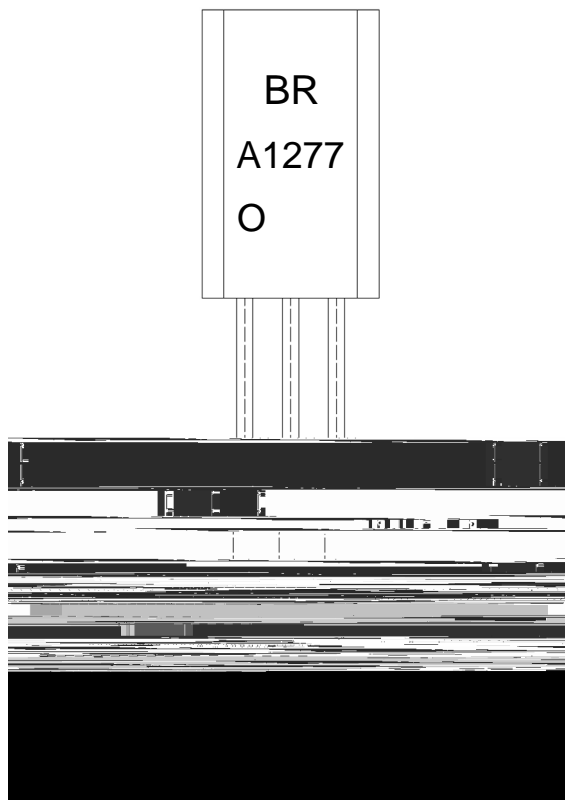
/ Electrical Characteristics(Ta=25)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---------------|---|------|-----|------|---------|
| Collector to Emitter Breakdown Voltage | V_{CEO} | $I_C=-1.0mA$ $I_B=0$ | -400 | | | V |
| Collector to Base Breakdown Voltage | V_{CBO} | $I_C=-100\mu A$ $I_E=0$ | -400 | | | V |
| Emitter to Base Breakdown Voltage | V_{EBO} | $I_E=-100\mu A$ $I_C=0$ | -7.0 | | | V |
| Collector Cut-Off Current | I_{CBO} | $V_{CB}=-400V$ $I_E=0$ | | | -10 | μA |
| Emitter Cut-Off Current | I_{EBO} | $V_{EB}=-5.0V$ $I_C=0$ | | | -10 | μA |
| DC Current Gain | h_{FE} | $V_{CE}=-5.0V$ $I_C=-100mA$ | 60 | | 200 | |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=-100mA$ $I_B=-10mA$ | | | -1.0 | V |
| Base to Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C=-100mA$ $I_B=-10mA$ | | | -1.2 | V |
| Turn-On Time | t_{on} | $I_C=-100mA$ $R_L=1.5K$ $I_{B1}=-10mA$ $I_{B2}=20mA$ $V_{CC}=-150V$ | | | 1.0 | μs |
| Storage Time | t_{stg} | | | | 4.0 | |
| Turn-Off Time | t_{ff} | | | | 1.0 | |

/ Electrical Characteristic Curve



/ Marking Instructions



BR:

A1277

O: h_{FE}

Note:

BR: Company Code.

A1277: Product Type.

O: 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 mm ³) |
|--------------|-------|--|--|--|-----------|--|-------------------------|
| | | | | | | | |
| | | | | | | | |

/ AMMO

| Package Type | Units | | | | Dimension | | (unit mm ³) |
|--------------|-------|--|--|--|-----------|--|-------------------------|
| | | | | | | | |
| | | | | | | | |

/ Notices