

HIGH VOLTAGE APPLICATION.
TELEPHONE APPLICATION.

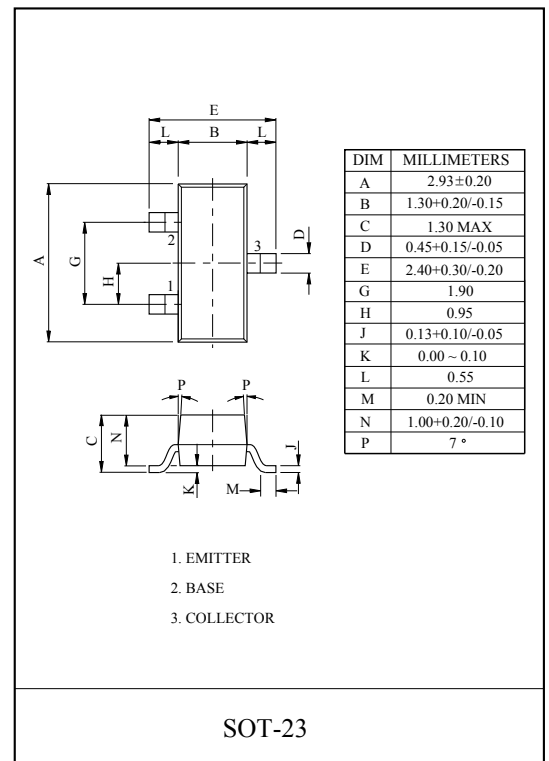
FEATURES

- Complementary to MMBTA42/43.

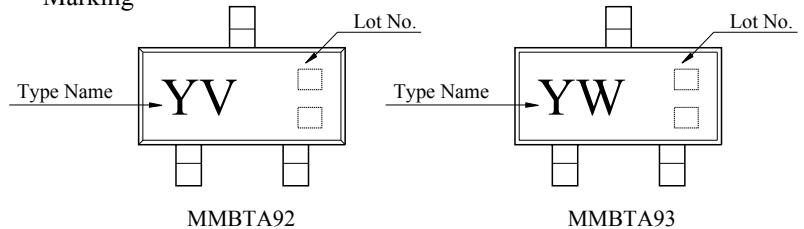
MAXIMUM RATING (Ta=25°C)

| CHARACTERISTIC | | SYMBOL | RATING | UNIT |
|-----------------------------|---------|-----------|-----------|------|
| Collector-Base Voltage | MMBTA92 | V_{CBO} | -300 | V |
| | MMBTA93 | | -200 | |
| Collector-Emitter Voltage | MMBTA92 | V_{CEO} | -300 | V |
| | MMBTA93 | | -200 | |
| Emitter-Base Voltage | | V_{EBO} | -5.0 | V |
| Collector Current | | I_C | -500 | mA |
| Emitter Current | | I_E | 500 | mA |
| Collector Power Dissipation | | P_C^* | 350 | mW |
| Junction Temperature | | T_j | 150 | °C |
| Storage Temperature | | T_{stg} | -55 ~ 150 | °C |

* : Package Mounted On 99.5% Alumina 10×8×0.6mm.



Marking



ELECTRICAL CHARACTERISTICS (Ta=25°C)

| CHARACTERISTIC | | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|------------|-----------------|------------------------------------|------|------|------|------|
| Collector-Base Breakdown Voltage | MMBTA92 | $V_{(BR)CBO}$ | $I_C=-100\mu A, I_E=0$ | -300 | - | - | V |
| | MMBTA93 | | | -200 | - | - | |
| Collector-Emitter Breakdown Voltage | MMBTA92 | $V_{(BE)CEO}$ | $I_C=-1.0mA, I_B=0$ | -300 | - | - | V |
| | MMBTA93 | | | -200 | - | - | |
| DC Current Gain | * h_{FE} | | $I_C=-1.0mA, V_{CE}=-10V$ | 25 | - | - | |
| | | | $I_C=-10mA, V_{CE}=-10V$ | 40 | - | - | |
| | | | $I_C=-30mA, V_{CE}=-10V$ | 25 | - | - | |
| Collector-Emitter Saturation Voltage | | * $V_{CE(sat)}$ | $I_C=-20mA, I_B=-2.0mA$ | - | - | -0.5 | V |
| Base-Emitter Saturation Voltage | | * $V_{BE(sat)}$ | $I_C=-20mA, I_B=-2.0mA$ | - | - | -0.9 | V |
| Transition Frequency | | f_T | $V_{CE}=-20V, I_C=-10mA, f=100MHz$ | 50 | - | - | MHz |
| Collector Output Capacitance | MMBTA92 | C_{ob} | $V_{CB}=-20V, I_E=0, f=1MHz$ | - | - | 6.0 | pF |
| | MMBTA93 | | | - | - | 8.0 | |

*Pulse Test : Pulse Width ≤ 300μS, Duty Cycle ≤ 2.0%

MMBTA92/93

