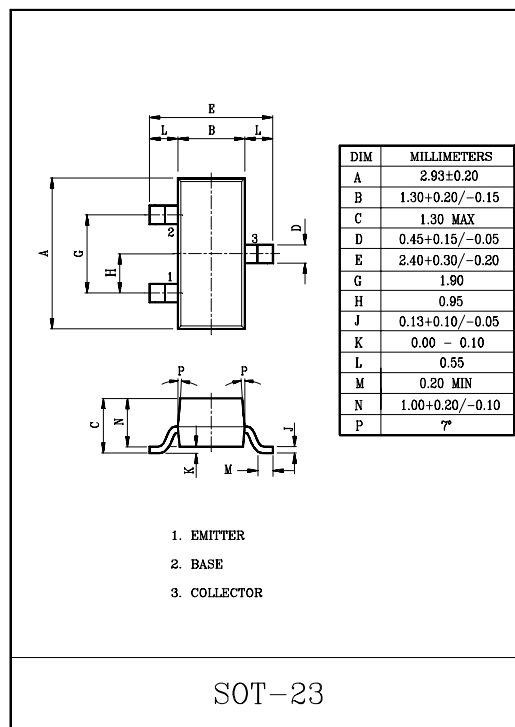


HIGH VOLTAGE APPLICATION.
TELEPHONE APPLICATION.

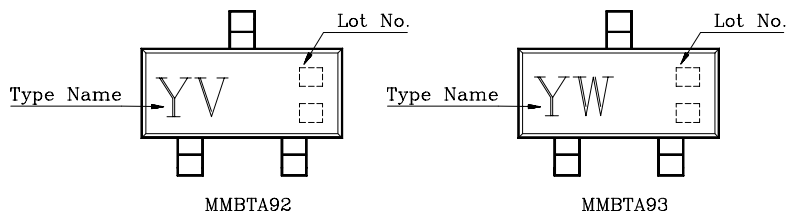
MAXIMUM RATINGS (Ta=25°C)

| 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 |

P_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 =-100μA, 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

