

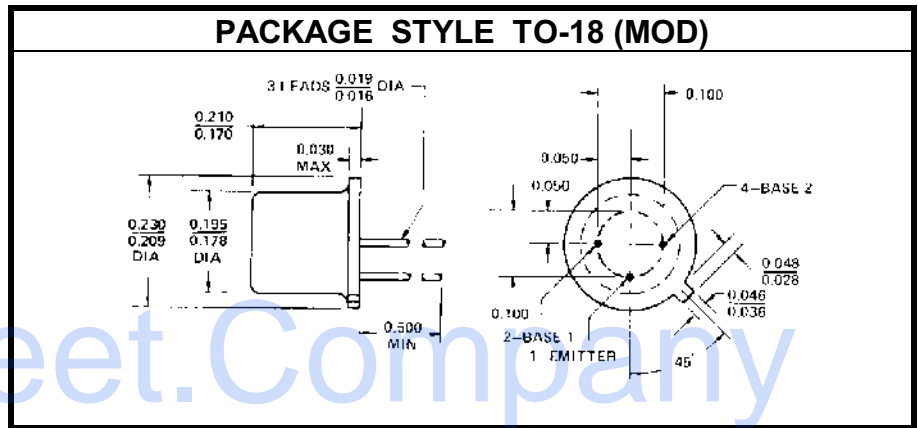
SILICON PN UNIJUNCTION TRANSISTOR

DESCRIPTION:

The **2N2646** is a Unijunction Transistor Used in General Purpose Pulse, Timing, Sense and Trigger Applications.

MAXIMUM RATINGS

| | |
|---------------|---------------------------------------------|
| I_C | 2.0 A (PULSED) |
| V_{CE} | 30 V |
| P_{DISS} | 300 mW @ $T_C = 25^\circ\text{C}$ |
| T_J | -65°C to $+125^\circ\text{C}$ |
| T_{STG} | -65°C to $+150^\circ\text{C}$ |
| θ_{JC} | 33°C/W |


CHARACTERISTICS $T_C = 25^\circ\text{C}$

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-----------------------|--------------------------------------------------------------|---------|---------|---------|------------------|
| η | $V_{B2B1} = 10\text{ V}$ | 0.56 | | 0.75 | -- |
| r_{BB} | $V_{B2B1} = 3.0\text{ V}$ | 4.7 | | 9.1 | $\text{K}\Omega$ |
| α_{rBB} | $V_{B2B1} = 3.0\text{ V}$ $T_A = -55$ to 125°C | 0.1 | | 0.9 | $\%/\text{C}$ |
| $V_{EB1(\text{SAT})}$ | $V_{B2B1} = 10\text{ V}$ $I_E = 50\text{ mA}$ | | 3.0 | | V |
| $I_{B2(\text{MOD})}$ | $V_{B2B1} = 10\text{ V}$ $I_E = 50\text{ mA}$ | | 20 | | mA |
| I_{B2EO} | $V_{B2E} = 30\text{ V}$ $I_{B1} = 0$ | | | 12 | μA |
| I_P | $V_{B2B1} = 25\text{ V}$ | | | 5.0 | μA |
| I_V | $V_{B2B1} = 20\text{ V}$ $R_{B2} = 100\ \Omega$ | 4.0 | | | mA |
| V_{OB1} | $V_{B2B1} = 20\text{ V}$ $R_{B1} = 20\ \Omega$ | 3.0 | 5.0 | | V |