

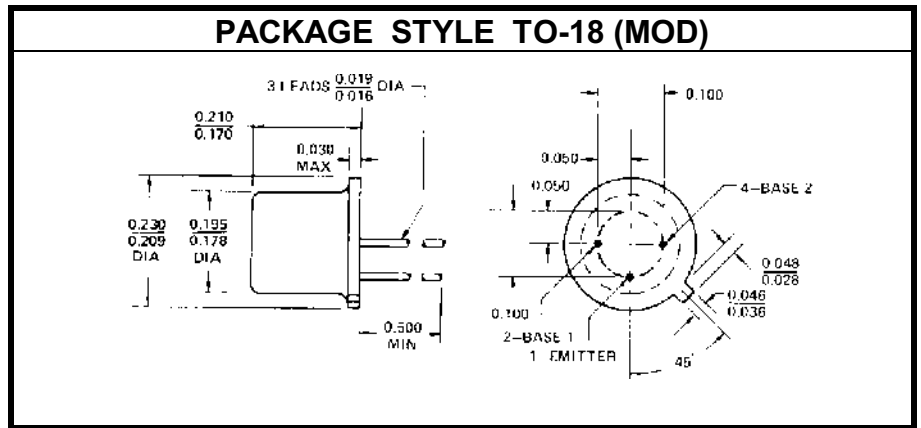
# SILICON PN UNIJUNCTION TRANSISTOR

**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 @ $T_C = 25^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+125^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+150^\circ\text{C}$
$\theta_{JC}$	$33^\circ\text{C/W}$


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

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