

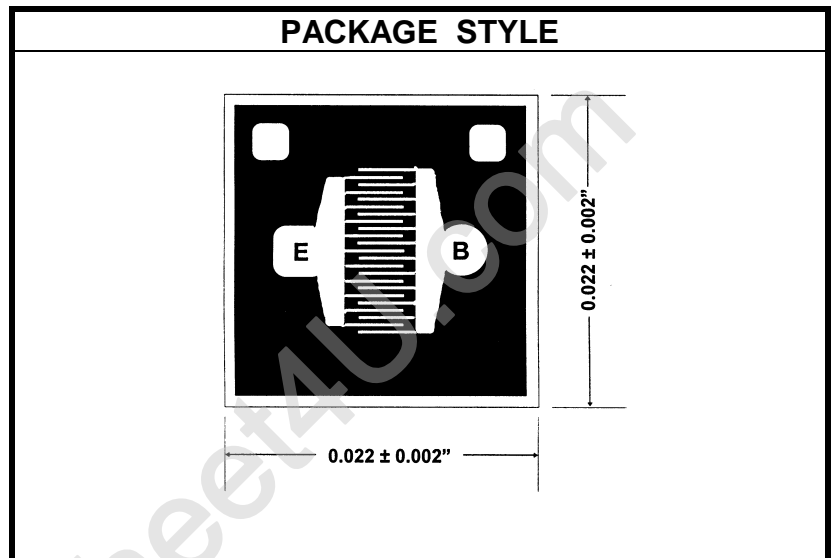
# PNP SILICON HIGH FREQUENCY TRANSISTOR

**DESCRIPTION:**

The **2N5583** is Designed for High Frequency Amplifier, and Non Saturated Switching Applications.

**MAXIMUM RATINGS**

$I_C$	500 mA
$V_{CE}$	-30 V
$P_{DISS}$	1.0 W @ $T_A = 25^\circ\text{C}$
	5.0 W @ $T_C = 25^\circ\text{C}$
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +200 °C
$\theta_{JC}$	350 °C/W


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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 10\text{ mA}$	-30			V
$BV_{CBO}$	$I_C = 10\ \mu\text{A}$	-30			V
$BV_{EBO}$	$I_C = 100\ \mu\text{A}$	-3.0			V
$I_{CBO}$	$V_{CB} = -20\text{ V}$			50	nA
$I_{EBO}$	$V_{EB} = -2.0\text{ V}$			500	nA
$h_{FE}$	$V_{CE} = -2.0\text{ V}$ $I_C = 40\text{ mA}$	20			---
	$I_C = 100\text{ mA}$	25		100	
	$V_{CE} = -5.0\text{ V}$ $I_C = 300\text{ mA}$	15			
$V_{CE(SAT)}$	$I_C = 100\text{ mA}$ $I_B = 10\text{ mA}$			-0.8	V
$V_{BE(ON)}$	$V_{CE} = -2.0\text{ V}$ $I_C = 100\text{ mA}$			-1.8	V
$f_t$	$V_{CE} = -10\text{ V}$ $I_C = 40\text{ mA}$ $f = 100\text{ MHz}$	1000			MHz
	$I_C = 100\text{ mA}$ $f = 100\text{ MHz}$	1300			
$C_{cb}$	$V_{CB} = -15\text{ V}$ $f = 100\text{ KHz}$			5.0	pF
$C_{eb}$	$V_{EB} = -0.5\text{ V}$ $f = 100\text{ KHz}$			35	pF
$r_{b'c}$	$V_{CB} = -10\text{ V}$ $I_C = 50\text{ mA}$ $f = 63.6\text{ MHz}$		8.2		pS
$t_d$ $t_r$ $t_f$	$V_{CC} = -31.4\text{ V}$ $I_C = 150\text{ mA}$		1.2		nS
	$R_C = 160\ \Omega$		2.2		
	$R_E = 26.6\ \Omega$		2.0		