

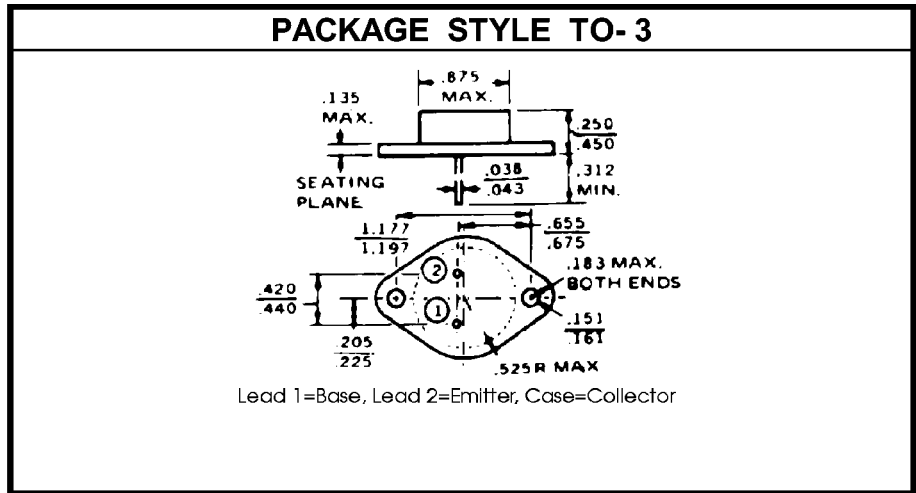
# SILICON PNP-DARLINGTON POWER TRANSISTOR

**DESCRIPTION:**

The **2N6054** is Designed for General Purpose Amplifier and Switching Applications.

**MAXIMUM RATINGS**

$I_C$	8.0 A
$V_{CE}$	-80 V
$P_{DISS}$	100 W @ $T_C = 25^\circ C$
$T_J$	$65^\circ C$ to $+200^\circ C$
$T_{STG}$	$65^\circ C$ to $+200^\circ C$
$\theta_{JC}$	$1.75^\circ C/W$


**CHARACTERISTICS**  $T_C = 25^\circ C$ 

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 100\text{ mA}$		-80			V
$I_{CEO}$	$V_{CE} = -40\text{ V}$				0.5	mA
$I_{CEX}$	$V_{CE} = -80\text{ V}$	$V_{BE(\text{off})} = 1.5\text{ V}$			0.5	mA
		$T_C = 150^\circ C$			5.0	mA
$I_{EBO}$	$V_{EB} = -5.0\text{ V}$				2.0	mA
$h_{FE}$	$V_{CE} = -3.0\text{ V}$	$I_C = 4.0\text{ A}$	750		18000	---
$V_{CE(\text{SAT})}$	$I_C = 4.0\text{ A}$	$I_B = 16\text{ mA}$			-2.0	V
	$I_C = 8.0\text{ A}$	$I_B = 80\text{ mA}$			-3.0	V
$V_{BE(\text{on})}$	$V_{CE} = -3.0\text{ V}$	$I_C = 4.0\text{ A}$			-2.8	V
$V_{BE(\text{SAT})}$	$I_C = 8.0\text{ A}$	$I_B = 80\text{ mA}$			-4.0	V
$h_{fe}$	$V_{CE} = -3.0\text{ V}$	$I_C = 3.0\text{ A}$		$f = 1.0\text{ KHz}$	300	---
$f_t$	$V_{CE} = -3.0\text{ V}$	$I_C = 3.0\text{ A}$		$f = 1.0\text{ MHz}$	4.0	---
$C_{ob}$	$V_{CB} = -10\text{ V}$			$f = 100\text{ KHz}$	300	pF