

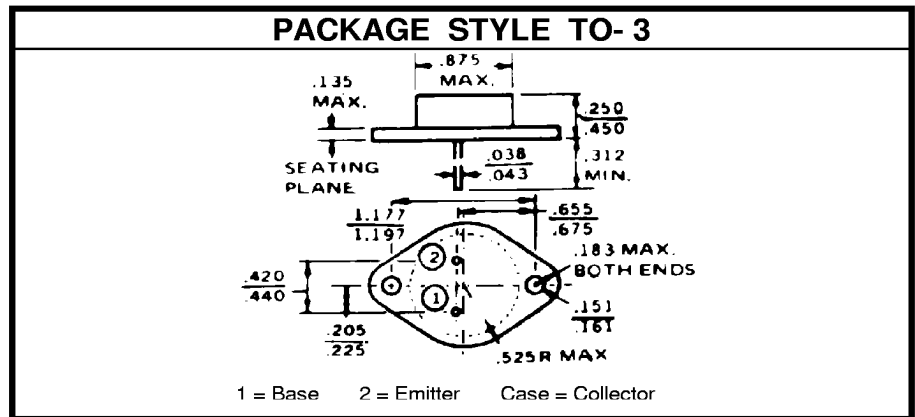
SILICON NPN POWER TRANSISTOR

DESCRIPTION:

The **2N3055S** is Designed for General Purpose Amplifier and Switching Applications.

MAXIMUM RATINGS

I_C	15 A
I_B	7.0 A
V_{CE}	60 V
P_{DISS}	117 W @ $T_c = 25^\circ\text{C}$
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+200^\circ\text{C}$
θ_{JC}	1.50 $^\circ\text{C}/\text{W}$


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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 200\text{ mA}$	60			V
BV_{CER}	$I_C = 200\text{ mA}$ $R_{BE} = 100\ \Omega$	70			V
I_{CEX}	$V_{CE} = 100\text{ V}$ $V_{BE} = -1.5\text{ V}$ $T_c = 25^\circ\text{C}$ $T_c = 150^\circ\text{C}$			5.0 30	mA mA
I_{CEO}	$V_{CE} = 30\text{ V}$			700	μA
I_{EBO}	$V_{EB} = 7.0\text{ V}$			5.0	mA
h_{FE}	$V_{CE} = 4.0\text{ V}$ $I_C = 4.0\text{ A}$ $T_c = -55^\circ\text{C}$ $I_C = 4.0\text{ A}$ $I_C = 10\text{ A}$	20 5.0 5.0		70	---
$V_{CE(SAT)}$	$I_C = 4.0\text{ A}$ $I_B = 0.4\text{ A}$ $I_C = 10\text{ A}$ $I_B = 3.3\text{ A}$			1.1 4.0	V
$V_{BE(ON)}$	$V_{CE} = 4.0\text{ V}$ $I_C = 4.0\text{ A}$			1.8	V
f_t	$V_{CE} = 4.0\text{ V}$ $I_C = 1.0\text{ A}$ $f = 0.5\text{ MHz}$	0.8			MHz
$I_{s/b}$	$V_{CE} = 40\text{ V}$ $t = 1.0\text{ s}$ (NONREPETITIVE)		2.87		A