

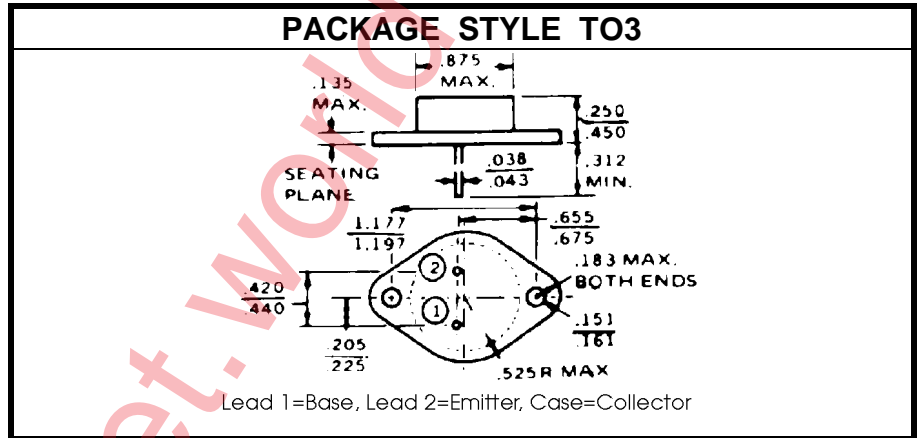
SILICON NPN POWER TRANSISTOR

DESCRIPTION:

The **2N3055A** 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}	115 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}	1.52°C/W


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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 200\text{ mA}$	60			V
I_{CEV}	$V_{CE} = 100\text{ V}$ $V_{BE} = -1.5\text{ V}$ $T_C = 25^\circ\text{C}$ $T_C = 150^\circ\text{C}$			5.0 30	mA
I_{CEO}	$V_{CE} = 30\text{ V}$			700	μA
I_{EBO}	$V_{EB} = 7.0\text{ V}$			5.0	mA
h_{FE}	$V_{CE} = 2.0\text{ V}$ $I_C = 4.0\text{ A}$ $V_{CE} = 4.0\text{ V}$ $I_C = 4.0\text{ A}$ $I_C = 10\text{ A}$	10 20 5.0		70	---
$V_{CE(SAT)}$	$I_C = 4.0\text{ A}$ $I_B = 0.4\text{ A}$ $I_C = 10\text{ A}$ $I_B = 3.3\text{ A}$ $I_C = 15\text{ A}$ $I_B = 7.0\text{ A}$			1.1 3.0 5.0	V
$V_{BE(ON)}$	$V_{CE} = 4.0\text{ V}$ $I_C = 4.0\text{ A}$	0.7		1.8	V
C_{ob}	$V_{CB} = 10\text{ V}$ $f = 1.0\text{ MHz}$	60		600	pF
f_t	$V_{CE} = 4.0\text{ V}$ $I_C = 1.0\text{ A}$ $f = 1.0\text{ MHz}$	0.8		6.0	MHz
$I_{s/b}$	$V_{CE} = 60\text{ V}$ $t = 500\text{ mS}$ (NONREPETITIVE)	1.95			A
t_d	$I_C = 4.0\text{ A}$ $I_{B1} = I_{B2} = 0.4\text{ A}$			0.5	μS
t_r	$I_C = 4.0\text{ A}$ $I_{B1} = I_{B2} = 0.4\text{ A}$			4.0	μS
t_s	$I_C = 4.0\text{ A}$ $I_{B1} = I_{B2} = 0.4\text{ A}$			3.0	μS
t_f	$I_C = 4.0\text{ A}$ $I_{B1} = I_{B2} = 0.4\text{ A}$			6.0	μS