



PNP TIP2955
NPN TIP3055

SILICON POWER TRANSISTORS

The TIP3055 is a NPN epitaxial-base transistor in TO3PN package. It is intended for power switching circuits, series and shunt regulators, output stage and hi-fi amplifiers.

The complementary is the TIP2955

For PNP types Voltage and Current are Negative.

Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings		Value	Unit
V_{CBO}	Collector-Base Voltage		100	V
V_{CEO}	Collector-Emitter Voltage		60	V
V_{EBO}	Emitter-Base Voltage		7	V
I_C	Collector Current		15	A
I_B	Base Current		7	A
P_T	Total Dissipation	@ $T_{mb} < 25^\circ$	90	W
t_j	Junction Temperature		150	$^\circ\text{C}$
t_s	Storage Temperature range		-65 to +150	

THERMAL CHARACTERISTICS

Symbol	Ratings		Value	Unit
R_{thJC}	From Junction to Case Thermal Resistance		1.39	$^\circ\text{C/W}$

PNP TIP2955 NPN TIP3055

ELECTRICAL CHARACTERISTICS

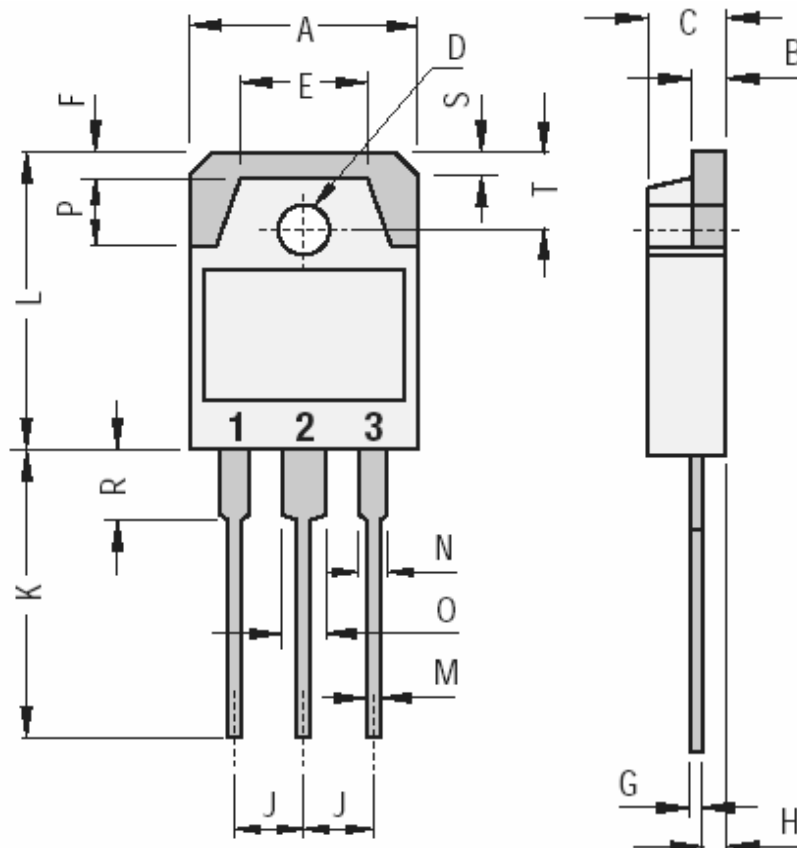
TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)	Min	Typ	Max	Unit
$V_{CEO} (*)$	Collector-Emitter Breakdown Voltage	$I_C = 30 \text{ mA}, I_B = 0$	60	-	-	V
I_{CEO}	Collector Cutoff Current	$I_B = 0, V_{CE} = 30 \text{ V}$	-	-	700	μA
I_{CER}	Collector Cutoff Current	$V_{CE} = 70 \text{ V}, R_{BE} = 100 \Omega$	-	-	1	mA
I_{CEX}	Collector Cutoff Current	$V_{CE} = 70 \text{ V}, V_{BE} = 1.5 \text{ V}$	-	-	5	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 7 \text{ V}, I_C = 0$	-	-	5	mA
$V_{CE(SAT)} (*)$	Collector-Emitter saturation Voltage	$I_C = 4 \text{ A}, I_B = 400 \text{ mA}$	-	-	1.1	V
		$I_C = 10 \text{ A}, I_B = 3.3 \text{ A}$	-	-	3	
$V_{BE} (*)$	Base-Emitter On Voltage	$I_C = 4 \text{ A}, V_{CE} = 4 \text{ V}$	-	-	1.8	V
$h_{FE} (*)$	DC Current Gain	$I_C = 4 \text{ A}, V_{CE} = 4 \text{ V}$	20	-	70	-
		$I_C = 10 \text{ A}, V_{CE} = 4 \text{ V}$	5	-	-	
$I_{s/b}$	Second Breakdown collector Current. With base Forward Biased	$V_{CE} = 30 \text{ V}, t = 1.0 \text{ s}$ Non repetitive	3	-	-	A
f_T	Transition Frequency	$V_{CE} = 10 \text{ V}, I_C = 0.5 \text{ A}$ $f = 1 \text{ kHz}$	2.5	-	-	MHz

(*) Pulse Width $\approx 300 \mu\text{s}$, Duty Cycle $\angle 1.5\%$

PNP TIP2955
NPN TIP3055

MECHANICAL DATA CASE TO3PN Non Isolated Plastic Package



DIMENSIONS (mm)		
	Min.	Max.
A	15.20	16.00
B	1.90	2.10
C	4.60	5.00
D	3.10	3.30
E		9.60
F		2.00
G	0.35	0.55
H		1.40
J	5.35	5.55
K	20.00	
L	19.60	20.20
M	0.95	1.25
N		2.00
O		3.00
P		4.00
R		4.00
S		1.80
T	4.80	5.20

Pin 1 :	Base
Pin 2 :	Collector
Pin 3 :	Emitter
Package	Collector

Revised August 2012

Information furnished is believed to be accurate and reliable. However, Comset Semiconductors assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. Data are subject to change without notice. Comset Semiconductors makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Comset Semiconductors assume any liability arising out of the application or use of any product and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Comset Semiconductors' products are not authorized for use as critical components in life support devices or systems.