

**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	°C
$t_s$	Storage Temperature range	-65 to +150	

**THERMAL CHARACTERISTICS**

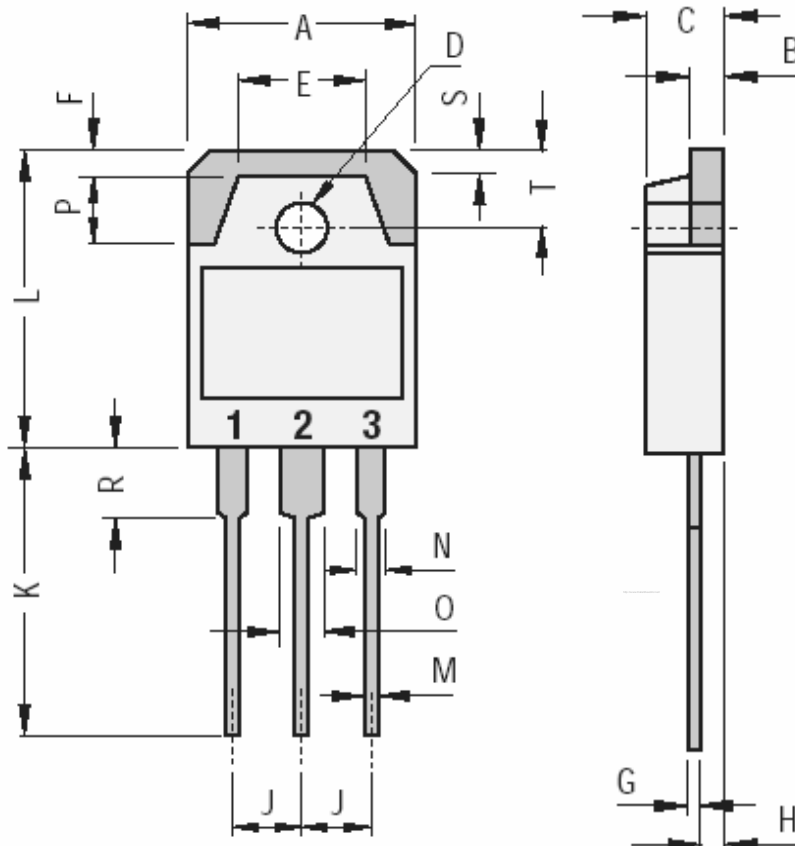
Symbol	Ratings	Value	Unit
$R_{thJC}$	From Junction to Case Thermal Resistance	1.39	°C/W

**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	$\mu\text{A}$
$I_{CER}$	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.