



NPN TIP35-A-B-C

SILICON POWER TRANSISTORS

They are PNP power transistors mounted in jedec TO-3PN. They are intended for use in general purpose power amplifier and switching applications.
 PNP complements are TIP36-A-B-C
 Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings		Value	Unit
V_{CBO}	Collector-Base Voltage	TIP35	40	V
		TIP35A	60	
		TIP35B	80	
		TIP35C	100	
V_{CEO}	Collector-Emitter Voltage	TIP35	40	V
		TIP35A	60	
		TIP35B	80	
		TIP35C	100	
V_{EBO}	Emitter-Base Voltage	TIP35	5	V
		TIP35A		
		TIP35B		
		TIP35C		
I_c	Collector Current	TIP35	25	A
		TIP35A		
		TIP35B		
		TIP35C		
I_{CM}	Collector Peak Current	TIP35	40	A
		TIP35A		
		TIP35B		
		TIP35C		

NPN TIP35-A-B-C

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings			Value	Unit
I_B	Base Current		TIP35	5	A
			TIP35A		
			TIP35B		
			TIP35C		
P_C	Power Dissipation	@ $T_c < 25^\circ$	TIP35	125	Watts
			TIP35A		
			TIP35B		
			TIP35C		
		@ $T_a < 25^\circ$	TIP35	3.5	
			TIP35A		
			TIP35B		
			TIP35C		
T_J	Junction Temperature		TIP35	150	$^\circ\text{C}$
			TIP35A		
			TIP35B		
			TIP35C		
T_s	Storage Temperature range		TIP35	-65 to +150	
			TIP35A		
			TIP35B		
			TIP35C		

THERMAL CHARACTERISTICS

Symbol	Ratings		Value	Unit
R_{thJ-MB}	From junction to mounting base	TIP35	1	$^\circ\text{C/W}$
		TIP35A		
		TIP35B		
		TIP35C		
R_{thJ-A}	From junction to ambient in free air	TIP35	35.7	$^\circ\text{C/W}$
		TIP35A		
		TIP35B		
		TIP35C		

NPN TIP35-A-B-C

ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

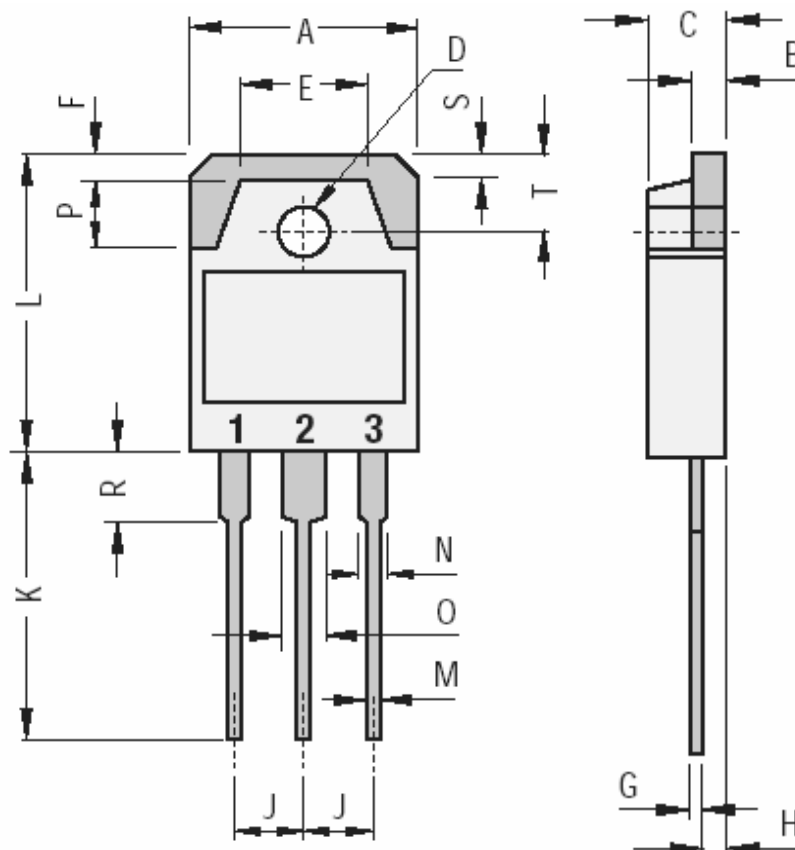
Symbol	Ratings	Test Condition(s)		Min	Typ	Max	Unit
I_{CES}	Collector Cutoff Current	$I_E = 0, V_{CE} = V_{CEO}$	TIP35	-	-	0.7	Ma
			TIP35A				
			TIP35B				
			TIP35C				
I_{CEO}	Collector Cutoff Current	$I_B = 0, V_{CE} = 30V$	TIP35	-	-	1	mA
		TIP35A					
		$I_B = 0, V_{CE} = 60V$	TIP35B	-	-	1	
		TIP35C					
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 5\text{ V}, I_C = 0$	TIP35	-	-	1	mA
			TIP35A				
			TIP35B				
			TIP35C				
V_{CEO}	Collector-Emitter Breakdown Voltage (*)	$I_C = 30\text{ mA}, I_B = 0$	TIP35	40	-	-	V
			TIP35A	60	-	-	
			TIP35B	80	-	-	
			TIP35C	100	-	-	
$V_{CE(SAT)}$	Collector-Emitter saturation Voltage (*)	$I_C = 15\text{ A}, I_B = 1.5\text{ A}$	TIP35	-	-	1.8	V
			TIP35A				
			TIP35B				
			TIP35C				
		$I_C = 25\text{ A}, I_B = 5\text{ A}$	TIP35	-	-	4	V
			TIP35A				
			TIP35B				
			TIP35C				
$V_{BE(on)}$	Base-Emitter Voltage (*)	$I_C = 15\text{ A}, V_{CE} = 4\text{ V}$	TIP35	-	-	2	V
			TIP35A				
			TIP35B				
			TIP35C				
		$I_C = 25\text{ A}, V_{CE} = 4\text{ V}$	TIP35	-	-	4	V
			TIP35A				
			TIP35B				
			TIP35C				
h_{FE}	DC Current Gain (*)	$V_{CE} = 4\text{ V}, I_C = 1.5\text{ A}$	TIP35	25	-	-	-
			TIP35A				
			TIP35B				
			TIP35C				
		$V_{CE} = 4\text{ V}, I_C = 15\text{ A}$	TIP35	15	-	75	
			TIP35A				
			TIP35B				
			TIP35C				

(*) Pulse Width $\approx 300 \mu s$, Duty Cycle $\angle 2.0\%$

NPN TIP35-A-B-C

Symbol	Ratings	Test Condition(s)	Min	Typ	Max	Unit
f_T	Current Gain-Bandwidth Product	$V_{CE} = 10 \text{ V}$, $I_C = 10 \text{ A}$ $f = 1 \text{ kHz}$	3	-	-	MHz

MECHANICAL DATA CASE TO3PN Non Isolated Plastic Package



DIMENSIONS (mm)		
	Min.	Max.
A	15.20	1600
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
Case :	Collector

September 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.