

EVVOSEMI[®]

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

Product Specification

▶ Domestic	Part Number	TIP35C
▶ Overseas	Part Number	TIP35C
▶ Equivalent	Part Number	TIP35C

EV is the abbreviation of name EVVO

NPN POWER TRANSISTORS

Description:

The TIP35C is a silicon Epitaxial-Base NPN power transistor mounted in TO-3P plastic package.

Features:

- Low Leakage Current
- Low Switching Loss
- Minimum Lot-to-Lot For Reliability Operation
- Low Spread Of Dynamic Parameters

Applications:

It is intended for use in power amplifier and switching applications.

The complementary PNP type is TIP36C.

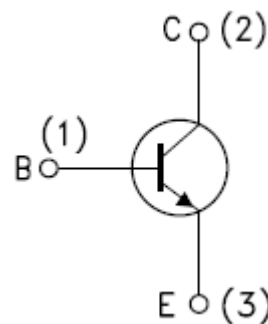
Ordering Information

PART NUMBER	PACKAGE	BRAND
TIP35C	TO-3P	EVVOSEMI

BV_{CEO}	P_{tot}	I_c
140V	125W	10A



TO-3P Not to Scale



Internal Schematic Diagram

Absolute Maximum Ratings $T_c = 25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Units
		TIP35C	
V_{CBO}	Collector-to-Base Voltage	140	V
V_{CEO}	Collector-to-Emitter Voltage ($I_B=0$)	140	
V_{EBO}	Emitter -to-Base Breakdown Voltage ($I_c=0$)	5.0	
I_c	Collector Current	10	A
P_{tot}	Total Dissipation at $T_{amb}=25^\circ\text{C}$	125	W
T_j	Operation Junction	150	$^\circ\text{C}$
T_{STG}	Storage Temperature Range	-55~150	

Caution: Stresses greater than those listed in "Absolute Maximum Ratings" Table may cause permanent damage to the device.

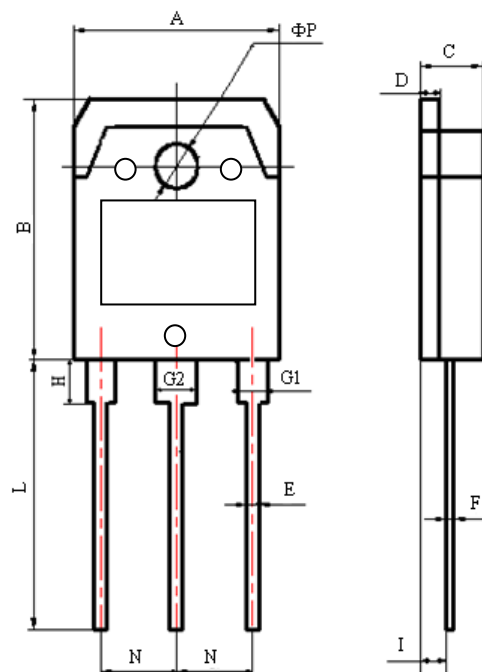
Thermal Resistance

Symbol	Parameter	Maximum	Units	Test Condition
		TIP35C		
$R_{\theta JC}$	Junction-to-Case	1.0	$^\circ\text{C}/\text{W}$	Water cooled heat sink, P_D adjusted for a peak junction temperature of $+150^\circ\text{C}$.
$R_{\theta JA}$	Junction-to-Air	50	$^\circ\text{C}/\text{W}$	1 cubic foot chamber, free air.

Electrical Characteristics (T_J= 25°C unless otherwise specified):

Symbol	Parameter	Rating			Units	Test Conditions
		Min.	Typ.	Max.		
ICBO	Collector-to-Base Cut-off Current	--	--	5	uA	V _{CB} =140V, I _E =0A
ICEO	Collector-to-Emitter Cut-off Current	--	--	5		V _{CE} =140V, I _E =0A
IEBO	Emitter-to-Base Cut-off Current	--	--	5		V _{BE} =5V, I _C =0A
VCBO	Collector-to-Base Voltage	140	--	--	V	I _C =0.1mA
VCEO	Collector-to-Emitter Voltage	140	--	--		I _C =10mA
VEBO	Emitter-to-Base Voltage	5	--	--		I _E =5mA
h _{FE}	DC Current Gain (Common Emitter)	55	--	160		V _{CE} =5V, I _C =1A *
h _{FE1}	DC Current Gain (Common Emitter)	35	--	--		V _{CE} =5V, I _C =5A
V _{CESAT}	Collector-to-Emitter Saturation Voltage	--	--	2.0	V	I _C =7A, I _B =0.7A *
V _{BESAT}	Base-to-Emitter Saturation Voltage	--	--	1.5		V _{CE} =5V, I _C =5A
f _T	Characteristic Frequency	--	30	--	MHz	V _{CE} =5V, I _C =1A, f=1MHz
*Pulsed: Pulse duration ≤ 300us, duty cycle ≤ 2%						

TO-3P MECHANICAL DATA



DIM.	mm	
	MIN	MAX
A	15.10	15.90
B	19.30	20.30
C	4.70	4.90
D	1.40	1.60
E	0.90	1.10
F	0.50	0.70
G1	2.00	2.20
G2	3.00	3.20
H	3.00	3.60
I	1.20	1.60
L	19.00	21.00
N	5.25	5.65
Φ P	3.10	3.30

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