

EVVOSEMI[®]

THINK CHANGE DO



ESD



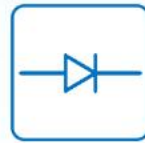
TVS



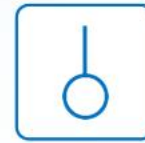
MOS



LDO



Diode



Sensor



DC-DC

Product Specification

▶ Domestic	Part Number	TIP42C
▶ Overseas	Part Number	TIP42C
▶ Equivalent	Part Number	TIP42C

EV is the abbreviation of name EVVO

Silicon PNP Epitaxial Transistor

TIP42C

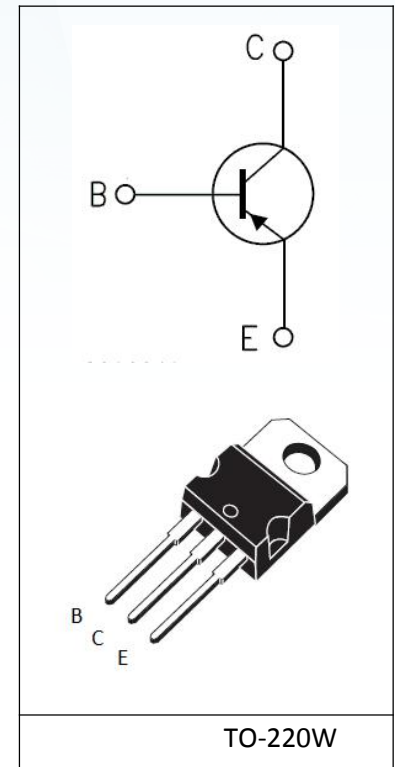
TIP42C, the base island technology PNP power transistor, make this device suitable for audio, power linear and switching applications. The complementary NPN type is TIP41C

Features

- Complementary PNP-NPN ^{TIP42C} devices
- h_{FE} grouping
- h_{FE} improved linearity
- RoHS product

Applications

- General purpose circuits
- Audio amplifier
- Power linear and switching



Absolute Maximum Ratings ($T_a=25^{\circ}\text{C}$ unless otherwise noted):

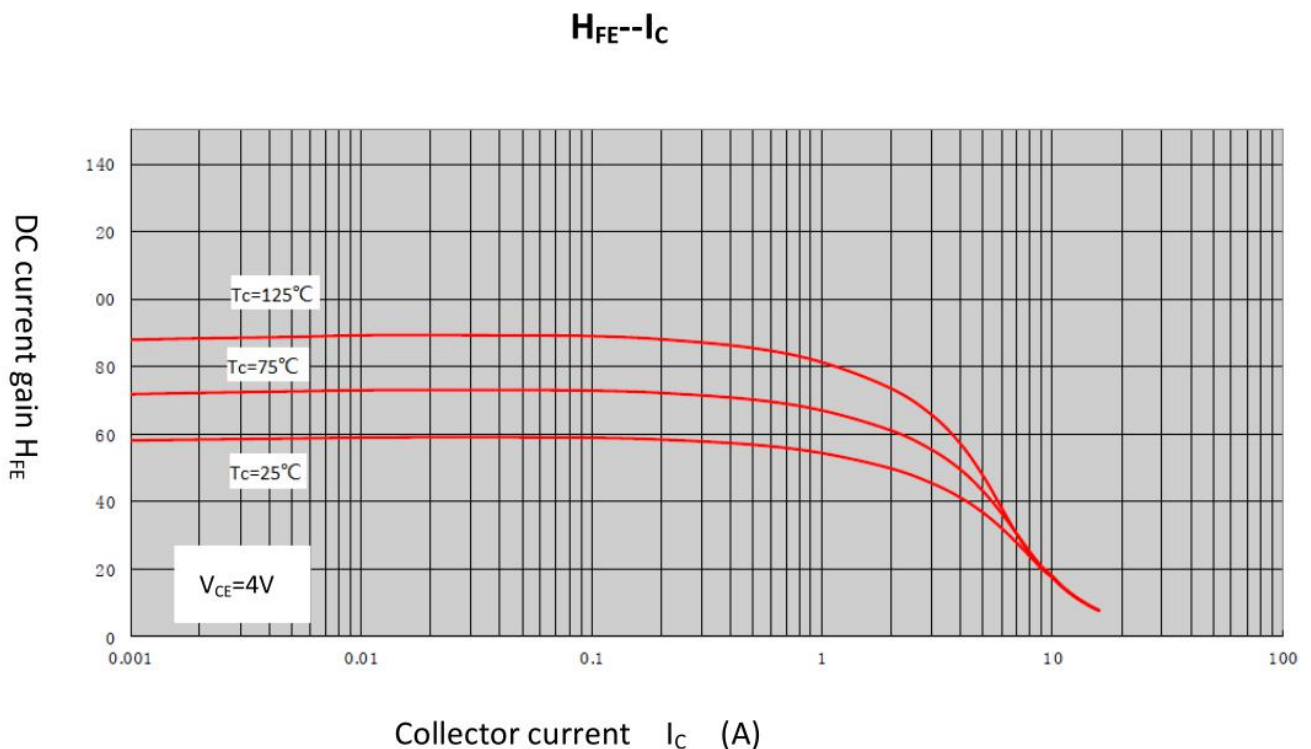
Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	-100	V
Collector-Emitter Voltage	V_{CE0}	-100	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current(DC)	I_C	-6	A
Collector Peak Current($t_p < 5\text{ms}$)	I_{CM}	-10	A
Base Current(DC)	I_B	-2	A
Base Peak Current($t_p < 5\text{ms}$)	I_{BM}	-4	A
Collector Power Dissipation	P_C	65	W
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65~150	$^{\circ}\text{C}$

Electrical Characteristics ($T_a=25^\circ\text{C}$ unless otherwise noted):

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base Cut-off Current	I_{CBO}	$V_{CB}=-100V, I_E=0$			-0.4	mA
Collector-Emitter Cut-off Current	I_{CEO}	$V_{CE}=-100V, I_B=0$			-0.4	mA
Emitter-Base Cut-off Current	I_{EBO}	$V_{EB}=-5V, I_C=0$			-8.0	mA
Collector-Base Breakdown Voltage	V_{CBO}	$I_C=-0.1\text{mA}$	-100			V
Collector-Emitter Breakdown Voltage	V_{CEO}	$I_C=-1\text{mA}$	-100			V
Emitter-Base Breakdown Voltage	V_{EBO}	$I_E=-100\mu\text{A}$	-5			V
DC Current Gain	h_{FE1}	$V_{CE}=-5V, I_C=-1\text{A}$	40			
	h_{FE2}	$V_{CE}=-5V, I_C=-3\text{A}$	15		75	
Collector-Emitter Saturation Voltage	V_{CEsat}	$I_C=-6\text{A}, I_B=-0.6\text{A}$			-1.5	V
Transition Frequency	f_T	$V_{CE}=-10V, I_{CE}=-0.5\text{A}$	3			Mhz

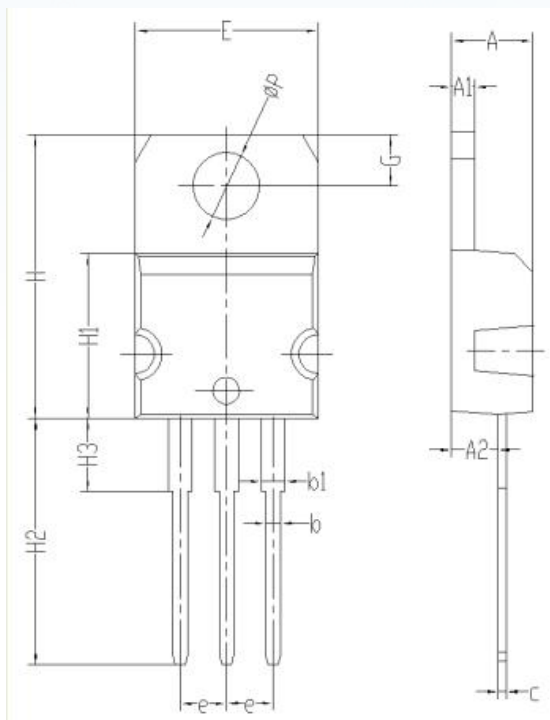
Thermal Characteristics

Symbol	Parameter	Typ.	Units
$R_{\theta JC}$	Junction-to-Case	2.0	$^\circ\text{C}/\text{W}$

Typical Characteristics


Package Information

TO-220M PACKAGE



Symbol	Dimensions (millimeters)	
	Min.	Max.
A	4.05	4.45
A1	1.05	1.45
A2	2.35	2.75
b	0.60	1.00
b1	1.12	1.52
c	0.25	0.65
e	2.34	2.74
E	9.95	10.4
H	15.3	15.7
H1	8.80	9.20
H2	13.0	14.0
H3	3.80	4.20
G	2.60	3.00
ΦP	3.60	4.00

Disclaimer

EVVOSEMI ("EVVO") reserves the right to make corrections, enhancements, improvements, and other changes to its products and services at any time, and to discontinue any product or service without notice.

EVVO warrants the performance of its hardware products to the specifications applicable at the time of sale in accordance with its standard warranty. Testing and other quality control techniques are used as deemed necessary by EVVO to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

Customers should obtain and confirm the latest product information and specifications before final design, purchase, or use. EVVO makes no warranty, representation, or guarantee regarding the suitability of its products for any particular purpose, nor does EVVO assume any liability for application assistance or customer product design. EVVO does not warrant or accept any liability for products that are purchased or used for any unintended or unauthorized application.

EVVO products are not authorized for use as critical components in life support devices or systems without the express written approval of EVVOSEMI.

The EVVO logo and EVVOSEMI are trademarks of EVVOSEMI or its subsidiaries in relevant jurisdictions. EVVO reserves the right to make changes without further notice to any products herein.