

EVVOSEMI[®]

THINK CHANGE DO



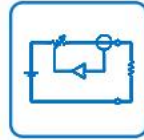
ESD



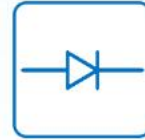
TVS



MOS



LDO



Diode



Sensor



DC-DC

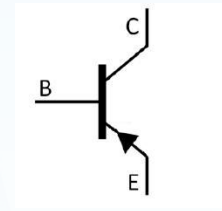
Product Specification

▶ Domestic	Part Number	EV2SA1837-T5
▶ Overseas	Part Number	2SA1837
▶ Equivalent	Part Number	2SA1837

"T5" means TO-220

EV is the abbreviation of name EVVO

Silicon PNP transistor



Power Amplifier Applications

- ① Complementary to 2SC4793
- ② High collector voltage: $V_{CEO} = -230V$ (min)

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the Absolute maximum ratings.



PIN1 : Base
 PIN 2 : Collector
 PIN 3 : Emitter

Absolute Maximum (°C):

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-230	V
Collector-emitter voltage	V_{CEO}	-230	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-1	A
Base current	I_B	-0.2	A
Collector power dissipation (Tc=25°C)	P_C	50	W
Junction temperature	T_j	150	°C
Storage temperature range	T_{STG}	-55~150	°C

Thermal Characteristics

Symbol	Parameter	Typ	Units
$R_{\theta jc}$	Junction-to-Case	3.0	°C/W

Silicon PNP transistor

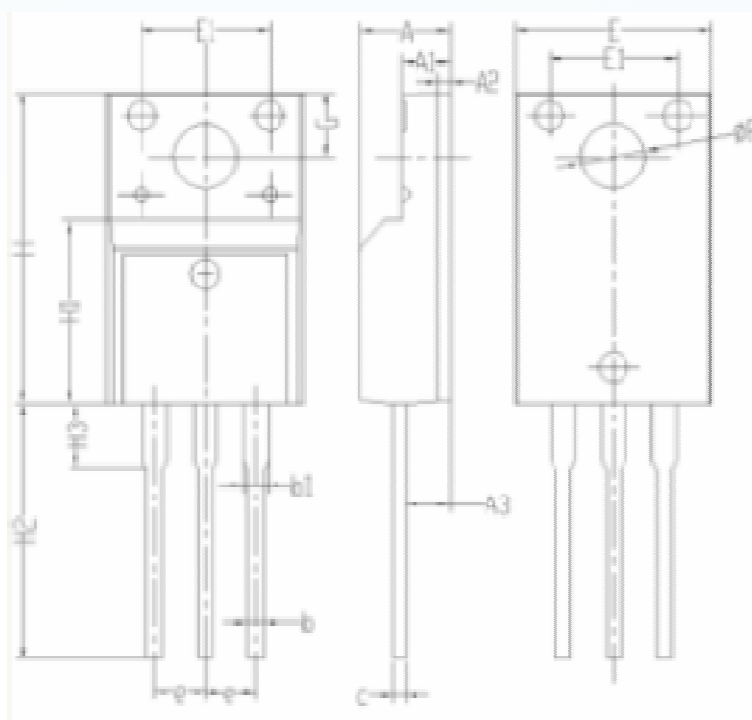
Electrical Characteristics ($^{\circ}\text{C}$):

Characteristics	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Cut-off Current	I_{CBO}	$V_{\text{CB}}=-230\text{V}, I_{\text{E}}=0$			-1.0	μA
Emitter-Base Cut-off Current	I_{EBO}	$V_{\text{EB}}=-5\text{V}, I_{\text{C}}=0$			-1.0	μA
Collector-Emitter Breakdown Voltage	V_{CEO}	$I_{\text{C}}=-1\text{mA}$	-230			V
DC current gain	h_{FE}	$I_{\text{C}}=-0.1\text{A}; V_{\text{CE}}=-5\text{V}$	100		300	
Collector-emitter saturation voltage	V_{CEsat}	$I_{\text{C}}=-0.5\text{A}; I_{\text{B}}=-0.05\text{A}$			-0.5	V
Base-Emitter Saturation Voltage	V_{BEsat}	$I_{\text{C}}=-0.5\text{A}, I_{\text{B}}=-0.05\text{A}$			-1.4	V
Base-emitter voltage	V_{BE}	$V_{\text{CE}}=-5\text{V}; I_{\text{C}}=-0.5\text{A}$			-1.5	V
Transition frequency	f_{T}	$V_{\text{CE}}=-10\text{V}; I_{\text{C}}=-100\text{mA}$		40		MHz

Silicon PNP transistor

Package Information

TO-220F PACKAGE



Symbol	Dimensions (millimeters)	
	Min	Max
A	4.35	4.75
A1	2.30	2.70
A2	0.40	0.80
A3	2.10	2.50
b	0.60	1.00
b1	1.00	1.40
c	0.30	0.70
e	2.30	2.70
E	9.80	10.2
E1	6.30	6.70
H	15.6	16.0
H1	8.80	9.20
H2	12.9	13.5
H3	3.10	3.50
G	3.10	3.50
ϕP	3.10	3.50

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