

General Purpose Transistors

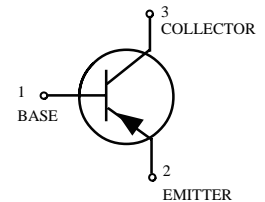
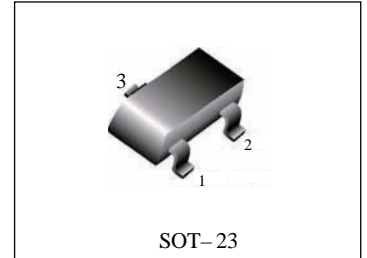
PNP Silicon

DESCRIPTION

FTA1365 is a mini package silicon PNP epitaxial transistor, designed with high collector current and small $V_{CE(sat)}$.

FEATURE

- Small collector to emitter saturation voltage.
 $V_{CE(sat)} = -0.2V$ typ
- Excellent linearity of DC forward current gain.
- Super mini package for easy mounting
- High collector current $I_{CM} = -1A$
- High gain band width product $f_T = 180MHz$ typ
- We declare that the material of product compliance with RoHS requirements.
- We declare that the material of product is ROHS compliant



APPLICATION

Small type motor drive, relay drive, power supply.

MAXIMUM RATINGS ($T_a = 25^\circ C$)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	-25	V
V_{CEO}	Collector to Emitter voltage	-20	V
V_{EBO}	Emitter to Base voltage	-4	V
I_O	Collector current	-700	mA
P_c	Collector dissipation	150	mW
T_j	Junction temperature	+125	$^\circ C$
T_{stg}	Storage temperature	-55 ~ +125	$^\circ C$

ORDERING INFORMATION

Device	Marking	Shipping
FTA1365-E	AE	3000/Tape & Reel
FTA1365-F	AF	3000/Tape & Reel
FTA1365-G	AG	3000/Tape & Reel

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

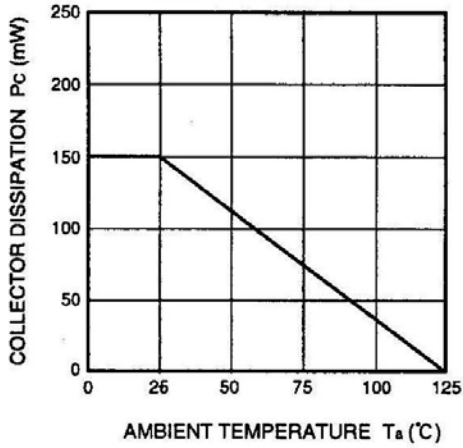
Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
C to B break down voltage	$V(BR)_{CBO}$	$I_C = -10 \mu A, I_E = 0$	-25	-	-	V
E to B break down voltage	$V(BR)_{EBO}$	$I_E = -10 \mu A, I_C = 0$	-4	-	-	V
C to E break down voltage	$V(BR)_{CEO}$	$I_C = -100 \mu A, R_{BE} = \infty$	-20	-	-	V
Collector cut off current	I_{CBO}	$V_{CB} = -25V, I_E = 0mA$	-	-	-1	μA
Emitter cut off current	I_{EBO}	$V_{EB} = -2V, I_C = 0mA$	-	-	-1	μA
DC forward current gain	hFE	$V_{CE} = -4V, I_C = -100mA$	150	-	800	
C to E Saturation Voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -25mA$	-	-0.2	-0.5	V
Gain bandwidth product	f_T	$V_{CE} = -6V, I_E = 10mA$	-	180	-	MHz

※) It shows hFE classification in below table.

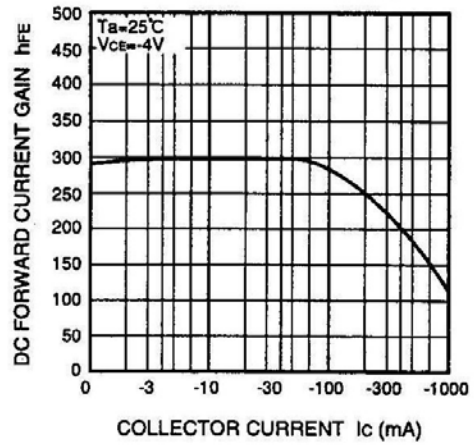
Item	E	F	G
hFE Item	150~300	250~500	400~800

TYPICAL CHARACTERISTICS

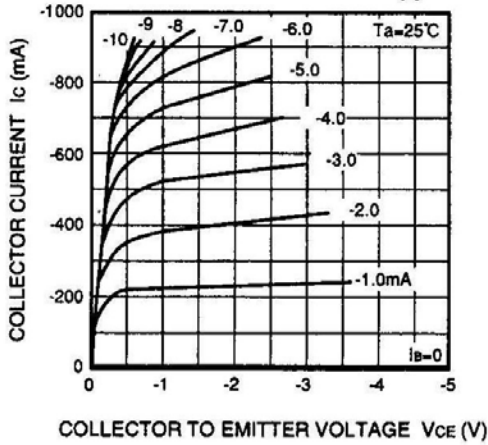
COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE



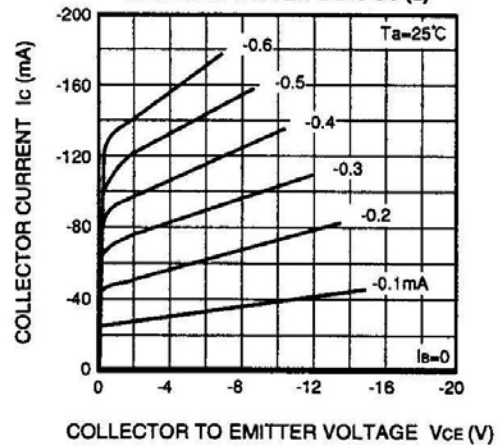
DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



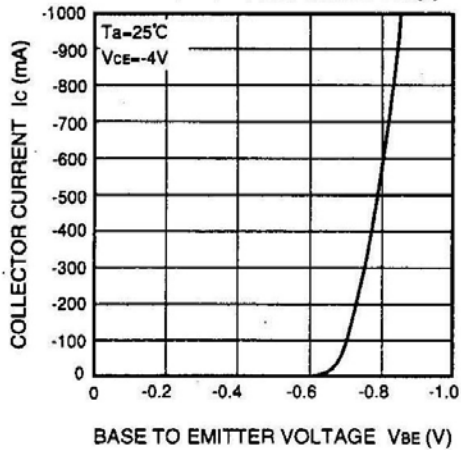
COMMON EMITTER OUTPUT (1)



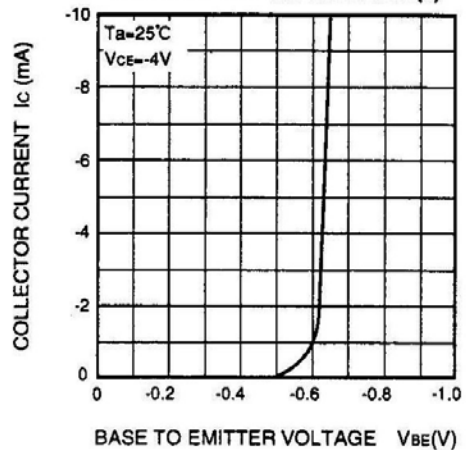
COMMON EMITTER OUTPUT (2)



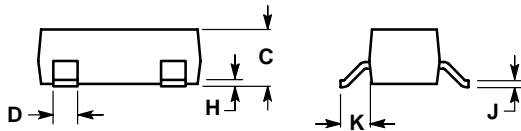
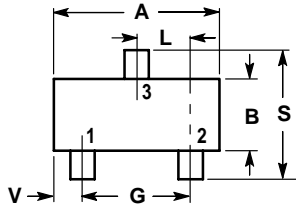
COMMON EMITTER TRANSFER (1)



COMMON EMITTER TRANSFER(2)



SOT-23



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60

- P N 1. BASE
 2. EMITTER
 3. COLLECTOR

