# FOR HIGH VOLTAGE DRIVE APPLICATION SILICON PNP EPITAXIAL TYPE

#### **DESCRIPTION**

A1368 is a silicon PNP epitaxial type transistor. It designed with high collector dissipation, high voltage.

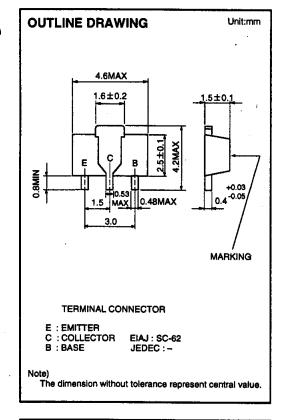
Complementary with 2SC3438.

#### **FEATURE**

- ●High voltage VcEo=-100V
- ●High collector current (Icм=-800mA)
- ●High gain band width product fr=130MHz typ
- ●High collector dissipation Pc=500mW
- Small package for mounting

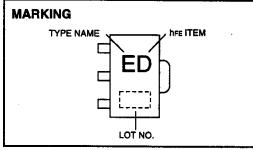
#### **APPLICATION**

Relay drive power supply etc.



#### MAXIMUM RATINGS (Ta=25℃)

Symbol	Parameter	Ratings	Unit
Vсво	Collector to Base voltage	-100	V
VEBO	Emitter to Base voltage	-5	V
VCEO	Collector to Emitter voltage	-100	V
Ісм	Peak Collector current	-800	mA
lc	Collector current	-500	mA
Pc	Collector dissipation(Ta=25°C)	500	mW
Tj	Junction temperature	+150	ర
Tstg	Storage temperature	-55 to +150	ార



#### ELECTRICAL CHARACTERISTICS (Ta=25℃)

Symbol	Parameter	Test conditions		Limits		
		Test cortainoris	Min	Тур	Max	Unit
V(BR)CBO	C to B break down voltage	Ic=-10 μ A,IE=0	-100			V
V(BR)EBO	E to B break down voltage	IE=-10 μ A,IC=0	-5			V
V(BR)CEO	C to E break down voltage	Ic=-1mA,RBE=∞	-100			V
Ісво	Collector cut off current	Vcs=-50V,IE=0			-0.5	μΑ
IEBO	Emitter cut off current	VEB=-2V,IC=0			-0.5	μΑ
hfE +	DC forward current gain	Vce=-10V,lc=-10mA	55		300	
VCE(sat)	C to E saturation voltage	Ic=-150mA,is=-15mA		-0.15	-0.5	V
fr	Gain band width product	VcE=-10V,IE=10mA		130		MHz
Соь	Collector output capacitance	Vcb=-10V,le=0, f=1MHz		11		pF

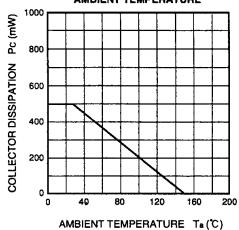
\* : It shows her classification in right table.

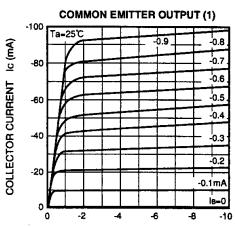
Marking	EC	ED	EE
hFE	55 to 110	90 to 180	150 to 300

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#### TYPICAL CHARACTERISTICS

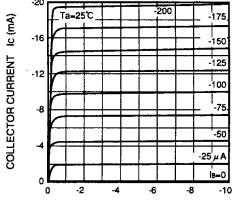


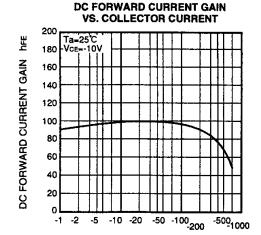




COLLECTOR TO EMITTER VOLTAGE VCE (V)

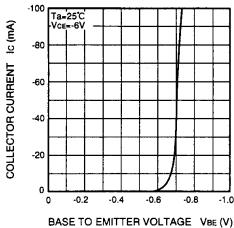
## **COMMON EMITTER OUTPUT (2)**





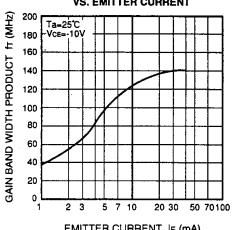
COLLECTOR TO EMITTER VOLTAGE VCE (V)

#### **COMMON EMITTER TRANSFER**



### **GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT**

COLLECTOR CURRENT Ic (mA)

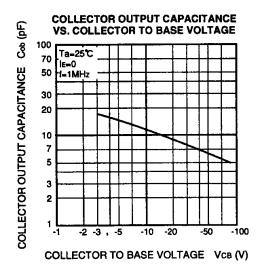


EMITTER CURRENT IE (mA)

**(SMALL-SIGNAL TRANSISTOR)** 

### 2SA1368

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