

**Silicon PNP transistor triple diffused type  
AP870**

**[ Applications ]**

High voltage switching and amplifier

**[ Feature ]**

High voltage VCEO= -600V

**[ Absolute Maximum ratings (Ta= 25C) ]**

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	-600	V
Collector-emitter voltage	VCEO	-600	V
Emitter-base voltage	VEBO	-7	V
Collector current (DC)	IC	-0.28	A
Collector current (Pulse)*	IC	-0.56	A
Junction temperature	Tj	150	C
Storage temperature	Tstg	-55 to 150	C

\*Single pulse width=10ms

**[ Electrical characteristics (Ta= 25C) ]**

Characteristic	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BVCBO	-600	-	-	V	IC= -1mA, IE= 0A
Collector-emitter breakdown voltage	BVCEO	-600	-	-	V	IC= -1mA, IB= 0A
Emitter-base breakdown voltage	BVEBO	-7	-	-	V	IE= -100uA, IC= 0A
Collector cut-off current	ICBO	-	-	-0.5	uA	VCB= -600V, IE= 0A
Collector cut-off current	ICEO	-	-	-3	uA	VCE= -600V, IB= 0A
Emitter cut-off current	IEBO	-	-	-0.5	uA	VEB= -7V, IC= 0A
DC current gain	hFE	54	-	310	-	VCE= -10V, IC= -10mA
Collector-emitter saturation voltage	VCE(sat)	-	-	-0.5	V	IC= -10mA, IB= -1mA
Base-emitter saturation voltage	VBE(sat)	-	-	-1	V	IC= -10mA, IB= -1mA
Transition frequency	f T	-	25	-	MHz	VCE= -10V, IE= 10mA
Collector output capacitance	Cob	-	14	-	p F	VCB= -10V, f = 1MHz, IE= 0A
Turn-on time	ton	-	-	0.5	us	VCC= -250V, IC= -10mA
Storage time	tstg	-	-	5	us	IB1= -IB2= -1mA
Fall time	tf	-	-	0.5	us	

Notice 1) These are measured data of transistors assembled by PHENITEC SEMICONDUCTOR Corp. and are for reference only.

Notice 2) The contents described herein are subject to change without notice.

