

**Silicon PNP transistor epitaxial type**  
**AP844**
**[ Applications ]**

High voltage switching  
 High voltage driver

**[ Feature ]**

High collector breakdown voltage VCEO= -400V, VCBO= -400V

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

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	-400	V
Collector-emitter voltage	VCEO	-400	V
Emitter-base voltage	VEBO	-7	V
Collector current (DC)	IC	-0.5	A
Collector current (Pulse)	ICP	-1	A
Base current	IB	-0.25	A
Junction temperature	Tj	150	C
Storage temperature	Tstg	-55 to 150	C

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

Characteristic	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BVCBO	-400	-	-	V	IC= -100uA, IE= 0A
Collector-emitter breakdown voltage	BVCEO	-400	-	-	V	IC= -1mA, IB= 0A
Emitter-base breakdown voltage	BVEBO	-7	-	-	V	IE= -100uA, IC= 0A
Collector cut-off current	ICES	-	-	-10	nA	VCE= -320V, IB= 0A
Collector cut-off current	ICBO	-	-	-10	nA	VCB= -320V, IE= 0A
Emitter cut-off current	IEBO	-	-	-10	nA	VEB= -6V, IC= 0A
DC current gain 1	hFE1	140	-	450	-	VCE= -5V, IC= -20mA
DC current gain 2	hFE2	140	-	400	-	VCE= -5V, IC= -0.1A
Collector-emitter saturation voltage 1	VCE(sat)1	-	-	-0.25	V	IC= -0.1A, IB= -10mA
Collector-emitter saturation voltage 2	VCE(sat)2	-	-	-0.4	V	IC= -0.2A, IB= -40mA
Base-emitter saturation voltage	VBE(sat)	-	-	-0.9	V	IC= -0.1A, IB= -10mA
Base-emitter on voltage	VBE(on)	-	-	-0.8	V	VCE= -10V, IC= -0.2A
Transition frequency	fT	-	75	-	MHz	VCE= -5V, IE= 50mA
Collector output capacitance	Cob	-	19	-	pF	VCB= -10V, IE= 0A, f= 1MHz
Delay time	td	-	89	-	ns	VCC= -200V, IC= -0.1A IB1= -10mA, IB2= 20mA
Rise time	tr	-	111	-	ns	
Storage time	tstg	-	2165	-	ns	
Fall time	tf	-	185	-	ns	

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.

No. AP844-20190827

