

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

High voltage switching
High voltage driver

[Feature]

High collector breakdown voltage $V_{CEO} = -400V$, $V_{CBO} = -400V$

[Absolute maximum ratings (Ta=25C)]

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	V _{CBO}	-400	V
Collector-emitter voltage	V _{CEO}	-400	V
Emitter-base voltage	V _{EBO}	-7	V
Collector current (DC)	I _C	-0.5	A
Collector current (Pulse)	I _{CP}	-1	A
Base current	I _B	-0.25	A
Junction temperature	T _j	150	C
Storage temperature	T _{stg}	-55 to 150	C

[Electrical characteristics (Ta=25C)]

Characteristic	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV _{CBO}	-400	-	-	V	I _C = -100uA, I _E = 0A
Collector-emitter breakdown voltage	BV _{CEO}	-400	-	-	V	I _C = -1mA, I _B = 0A
Emitter-base breakdown voltage	BV _{EBO}	-7	-	-	V	I _E = -100uA, I _C = 0A
Collector cut-off current	I _{CES}	-	-	-10	nA	V _{CE} = -320V, I _B = 0A
Collector cut-off current	I _{CBO}	-	-	-10	nA	V _{CB} = -320V, I _E = 0A
Emitter cut-off current	I _{EBO}	-	-	-10	nA	V _{EB} = -6V, I _C = 0A
DC current gain 1	h _{FE1}	140	-	450	-	V _{CE} = -5V, I _C = -20mA
DC current gain 2	h _{FE2}	140	-	400	-	V _{CE} = -5V, I _C = -0.1A
Collector-emitter saturation voltage 1	V _{CE(sat)1}	-	-	-0.25	V	I _C = -0.1A, I _B = -10mA
Collector-emitter saturation voltage 2	V _{CE(sat)2}	-	-	-0.4	V	I _C = -0.2A, I _B = -40mA
Base-emitter saturation voltage	V _{BE(sat)}	-	-	-0.9	V	I _C = -0.1A, I _B = -10mA
Base-emitter on voltage	V _{BE(on)}	-	-	-0.8	V	V _{CE} = -10V, I _C = -0.2A
Transition frequency	f _T	-	75	-	MHz	V _{CE} = -5V, I _E = 50mA
Collector output capacitance	C _{ob}	-	19	-	pF	V _{CB} = -10V, I _E = 0A, f = 1MHz
Delay time	t _d	-	89	-	ns	V _{CC} = -200V, I _C = -0.1A I _{B1} = -10mA, I _{B2} = 20mA
Rise time	t _r	-	111	-	ns	
Storage time	t _{stg}	-	2165	-	ns	
Fall time	t _f	-	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.

