

## Silicon NPN transistor epitaxial type DP006

### [ Applications ]

General purpose

### [ Feature ]

Low collector saturation voltage  $V_{CE(sat)} = 0.33V(\text{Max.})$  at  $I_C = 100mA$ ,  $I_B = 10mA$

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

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	80	V
Collector-emitter voltage	VCEO	80	V
Emitter-base voltage	VEBO	4	V
Collector current	IC	0.5	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	80	-	-	V	$I_C = 100\mu A$ , $I_E = 0A$
Collector-emitter breakdown voltage	BVCEO	80	-	-	V	$I_C = 1mA$ , $I_B = 0A$
Emitter-base breakdown voltage	BVEBO	4	-	-	V	$I_E = 100\mu A$ , $I_C = 0A$
Collector-cut off current	ICEO	-	-	100	nA	$V_{CE} = 60V$ , $I_B = 0A$
Collector-cut off current	ICBO	-	-	100	nA	$V_{CB} = 80V$ , $I_E = 0A$
Emitter-cut off current	IEBO	-	-	100	nA	$V_{EB} = 5V$ , $I_C = 0A$
DC current gain 1	hFE 1	90	-	-	-	$V_{CE} = 1V$ , $I_C = 10mA$
DC current gain 2	hFE 2	90	-	-	-	$V_{CE} = 1V$ , $I_C = 100mA$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	0.33	V	$I_C = 100mA$ , $I_B = 10mA$

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.