

## Silicon PNP transistor epitaxial type BP010

### [ Applications ]

General purpose

### [ Feature ]

Low collector saturation voltage  $V_{CE(sat)} = -0.4V(\text{Max.})$  at  $I_C = -0.1A$ ,  $I_B = -10mA$

### [ Absolute maximum ratings ( $T_a=25C$ ) ]

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	-40	V
Collector-emitter voltage	VCEO	-32	V
Emitter-base voltage	VEBO	-5	V
Collector current	$I_C$	-0.5	A
Junction temperature	$T_j$	150	C
Storage temperature	$T_{stg}$	-55 to 150	C

### [ Electrical characteristics ( $T_a=25C$ ) ]

Characteristic	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BVCBO	-40	-	-	V	$I_C = -100\mu A$ , $I_E = 0A$
Collector-emitter breakdown voltage	BVCEO	-32	-	-	V	$I_C = -1mA$ , $I_B = 0A$
Emitter-base breakdown voltage	BVEBO	-5	-	-	V	$I_E = -100\mu A$ , $I_C = 0A$
Collector-cut off current	$I_{CBO}$	-	-	-1	$\mu A$	$V_{CB} = -20V$ , $I_E = 0A$
Emitter-cut off current	$I_{EBO}$	-	-	-1	$\mu A$	$V_{EB} = -4V$ , $I_C = 0A$
DC current gain	$h_{FE}$	82	-	390	-	$V_{CE} = -3V$ , $I_C = -10mA$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	-0.4	V	$I_C = -0.1A$ , $I_B = -10mA$
Transition frequency	$f_T$	-	200	-	MHz	$V_{CE} = -5V$ , $I_E = 20mA$
Collector output capacitance	$C_{ob}$	-	7.5	-	pF	$V_{CB} = -10V$ , $f = 1MHz$ , $I_E = 0A$

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.