

Silicon NPN transistor epitaxial type DP021

[Applications]

General purpose

[Feature]

Low collector saturation voltage $V_{CE(sat)} = 0.5V(\text{Max.})$ at $I_C = 3A, I_B = 0.1A$

[Absolute maximum ratings (Ta=25C)]

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	80	V
Collector-emitter voltage	VCEO	75	V
Emitter-base voltage	VEBO	7	V
Collector current	IC	2	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	75	-	-	V	$I_C = 100mA, I_B = 0A$
Emitter-base breakdown voltage	BVEBO	7	-	-	V	$I_E = 100\mu A, I_C = 0A$
Collector cut-off current	ICBO	-	-	5	μA	$V_{CB} = 80V$
Emitter cut-off current	IEBO	-	-	100	μA	$V_{EB} = 5V$
DC current gain 1	hFE 1	30	-	130	-	$V_{CE} = 4V, I_C = 0.5A$
DC current gain 2	hFE 2	10	-	-	-	$V_{CE} = 2V, I_C = 1A$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	0.5	V	$I_C = 3A, I_B = 0.1A$

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.