

Silicon NPN transistor epitaxial type (Bias resistor built-in transistor)

ICT055N234

[Applications]

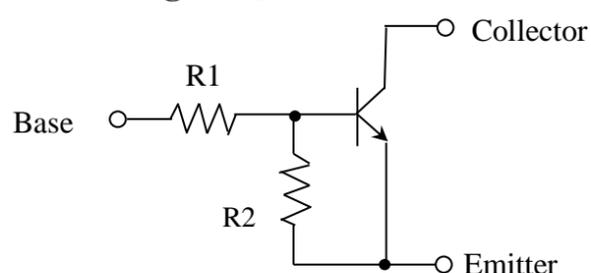
Switching circuit, Inverter circuit, Interface circuit and Driver circuit

[Feature]

Built-in bias resistors, Simplified circuit design

Complimentary pair with ICT055P234

[Circuit diagram]



[Absolute maximum ratings (Ta=25C)]

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	50	V
Collector-emitter voltage	VCEO	50	V
Emitter-base voltage	VEBO	5	V
Collector current	IC	500	mA
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 voltage	VCBO	50	-	-	V	ICB= 10uA
Collector-emitter voltage	VCEO	50	-	-	V	ICE= 1mA
Collector cut-off current	ICBO	-	-	0.1	uA	VCB= 50V
Collector cut-off current	ICEO	-	-	0.5	uA	VCE= 50V
Emitter cut-off current	IEBO	-	-	3	mA	VEB= 5V
DC current gain	hFE	56	-	-	-	VCE= 5V, IC= 50mA
Collector-emitter saturation voltage	VCE(sat)	-	-	0.3	V	IC= 50mA, IB= 2.5mA
Input on voltage	VI(on)	2	-	-	V	VCE= 0.3V, IC= 20mA
Input off voltage	VI(off)	-	-	0.3	V	VCE= 5V, IC= 100uA
Input resistance	R1	1.54	2.2	2.86	kohm	-
Resistance ratio	R2/R1	3.6	4.5	5.5	-	-
Transition Frequency	fT	-	200	-	MHz	VCE= 10V, IE= -5mA, f= 100MHz

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.