

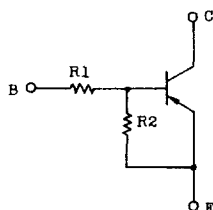
RN2001, 2002, 2003 RN2004, 2005, 2006

SWITCHING, INVERTER CIRCUIT, INTERFACE CIRCUIT
AND DRIVER CIRCUIT APPLICATIONS.

FEATURES:

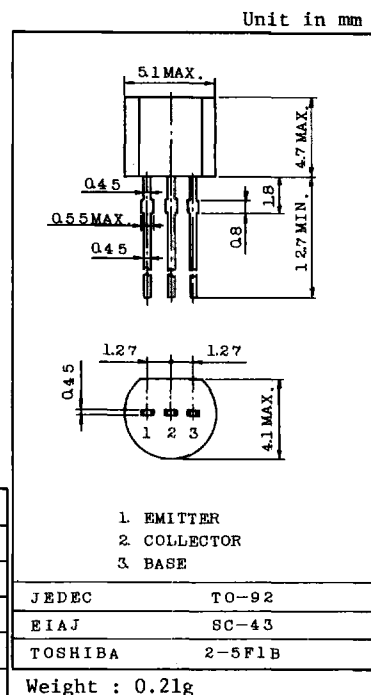
- . With Built-in Bias Resistors
- . Simplify Circuit Design
- . Reduce a Quantity of Parts and Manufacturing Process
- . Complementary to RN1001~1006

EQUIVALENT CIRCUIT



BIAS RESISTOR VALUES

TYPE No.	R1 (kΩ)	R2 (kΩ)
RN2001	4.7	4.7
RN2002	10	10
RN2003	22	22
RN2004	47	47
RN2005	2.2	47
RN2006	4.7	47



MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	RN2001 ~ 2006	V _{CB0}	-50	V
Collector-Emitter Voltage		V _{CE0}	-50	V
Emitter-Base Voltage	RN2001 ~ 2004	V _{EB0}	-10	V
	RN2005, 2006		-5	V
Collector Current	RN2001 ~ 2006	I _C	-100	mA
Collector Power Dissipation		P _C	400	mW
Junction Temperature		T _j	150	°C
Storage Temperature Range		T _{stg}	-55 ~ 150	°C

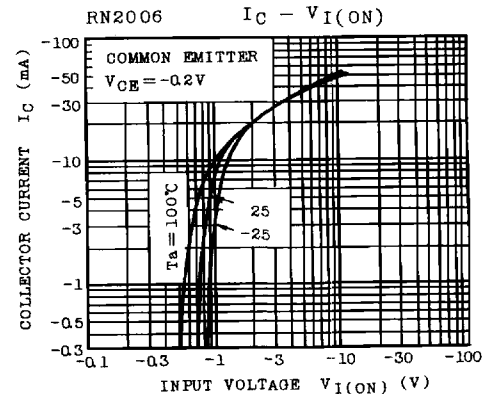
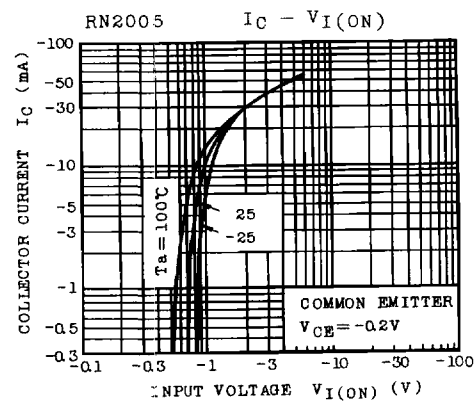
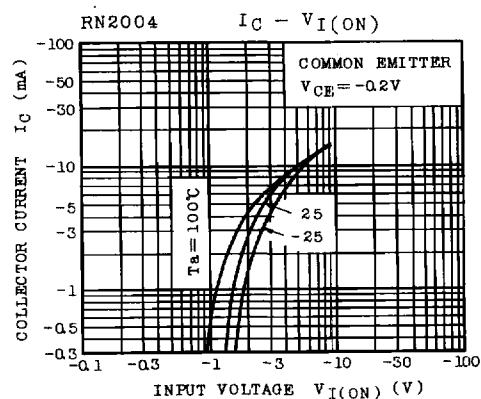
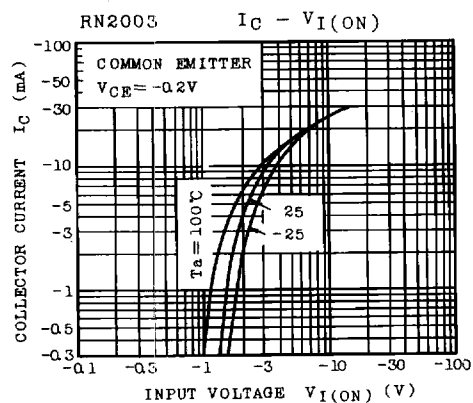
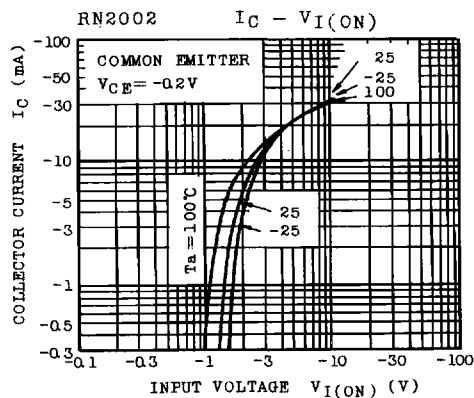
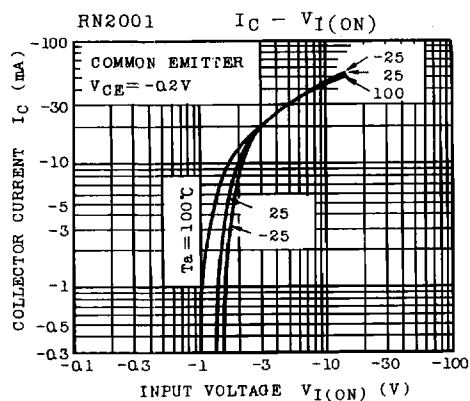
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	RN2001 ~ 2006	I _{CB0}	V _{CB} =-50V, I _E =0	-	-	-100	nA
		I _{CE0}	V _{CE} =-50V, I _B =0	-	-	-500	nA

RN2001, 2002, 2003
RN2004, 2005, 2006

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Emitter Cut-off Current	RN2001	I _{EB0}	V _{EB} =-10V, I _C =0	-0.82	-	-1.52	mA
	RN2002			-0.38	-	-0.71	
	RN2003			-0.17	-	-0.33	
	RN2004			-0.082	-	-0.15	
	RN2005		V _{EB} =-5V, I _C =0	-0.078	-	-0.145	
	RN2006			-0.074	-	-0.138	
DC Current Gain	RN2001	h _{FE}	V _{CE} =-5V I _C =-10mA	30	-	-	-
	RN2002			50	-	-	
	RN2003			70	-	-	
	RN2004			80	-	-	
	RN2005			80	-	-	
	RN2006			80	-	-	
Collector-Emitter Saturation Voltage	RN2001 ~ 2006	V _{CE(sat)}	I _C =-5mA I _B =-0.25mA	-	-0.1	-0.3	V
Input Voltage (ON)	RN2001	V _{I(ON)}	V _{CE} =-0.2V I _C =-5mA	-1.1	-	-2.0	V
	RN2002			-1.2	-	-2.4	
	RN2003			-1.3	-	-3.0	
	RN2004			-1.5	-	-5.0	
	RN2005			-0.6	-	-1.1	
	RN2006			-0.7	-	-1.3	
Input Voltage (OFF)	RN2001 ~ 2004	V _{I(OFF)}	V _{CE} =-5V I _C =-0.1mA	-1.0	-	-1.5	V
	RN2005 ~ 2006			-0.5	-	-0.8	
Transition Frequency	RN2001 ~ 2006	f _T	V _{CE} =-10V, I _C =-5mA	-	200	-	MHz
Collector Output Capacitance	RN2001 ~ 2006	C _{ob}	V _{CB} =-10V, I _E =0 f=1MHz	-	3	6	pF
Input Resistor	RN2001	R _I		3.29	4.7	6.11	kΩ
	RN2002			7	10	13	
	RN2003			15.4	22	28.6	
	RN2004			32.9	47	61.1	
	RN2005			1.54	2.2	2.86	
	RN2006			3.29	4.7	6.11	
Resistor Ratio	RN2001 ~ 2004	R _{1/R2}		0.9	1.0	1.1	-
	RN2005			0.0421	0.0468	0.0515	
	RN2006			0.09	0.1	0.11	



RN2001, 2002, 2003
RN2004, 2005, 2006

