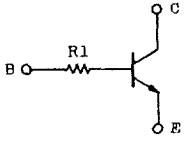
RN1010, 1011

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

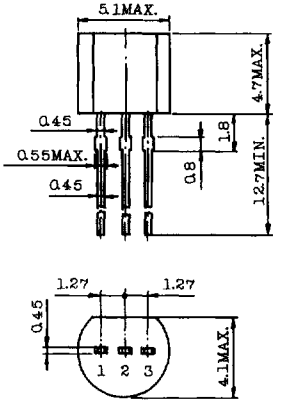
FEATURES:

. With Built-in Bias Resistors
. Simplify Circuit Design
. Reduce a Quantity of Parts and Manufacturing Process
. Complementary to RN2010, RN2011

EQUIVALENT CIRCUIT



Unit in mm



1. EMITTER
2. COLLECTOR
3. BASE

JEDEC	TO-92
EIAJ	SC-43
TOSHIBA	2-5F1B

Weight : 0.21g

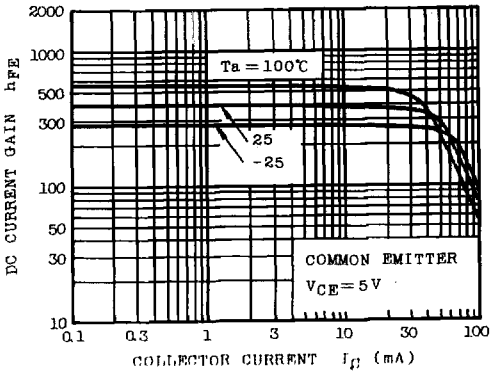
MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	100	mA
Collector Power Dissipation	P_C	400	mW
Junction Temperature	Tj	150	°C
Storage Temperature Range	Tstg	-55~150	°C

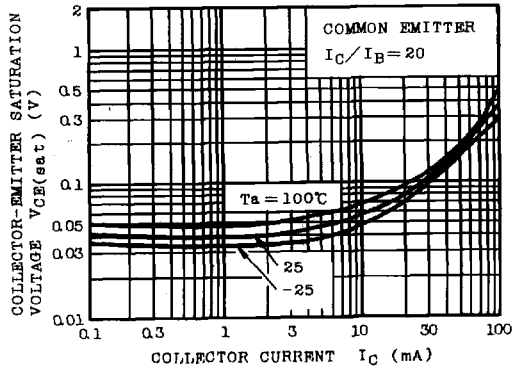
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	V_{CB}=50V, I_E=0	-	-	100	nA
Emitter Cut-off Current		I_{EBO}	V_{EB}=5V, I_C=0	-	-	100	nA
DC Current Gain		h_{FE}	V_{CE}=5V, I_C=1mA	120	-	700	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=5mA, I_B=0.25mA	-	0.1	0.3	V
Transition Frequency		f_T	V_{CE}=10V, I_C=5mA	-	250	-	MHz
Collector Output Capacitance		Cob	V_{CB}=10V, I_E=0, f=1MHz	-	3	6	pF
Input Resistor	RN1010	R1		3.29	4.7	6.11	kΩ
	RN1011			7	10	13	

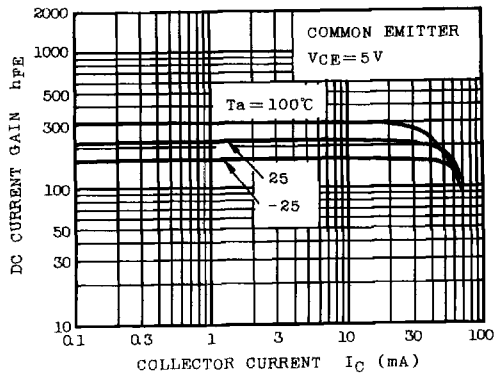
RN1010 $h_{FE} - I_C$



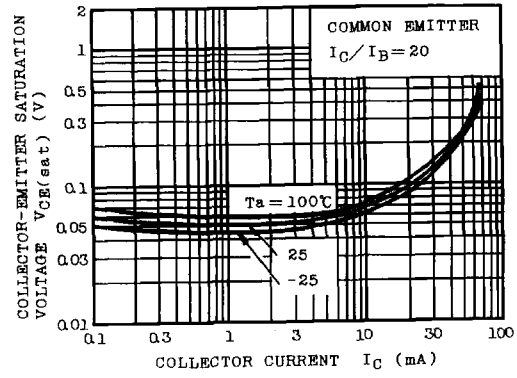
RN1010 $V_{CE(sat)} - I_C$



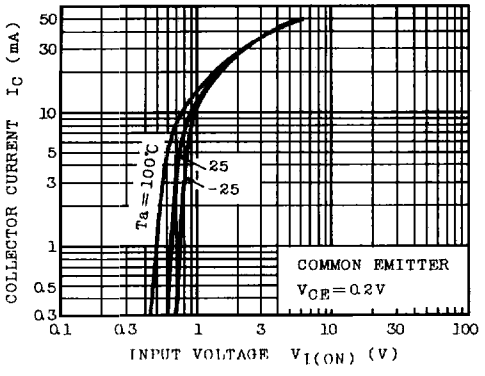
RN1011 $h_{FE} - I_C$



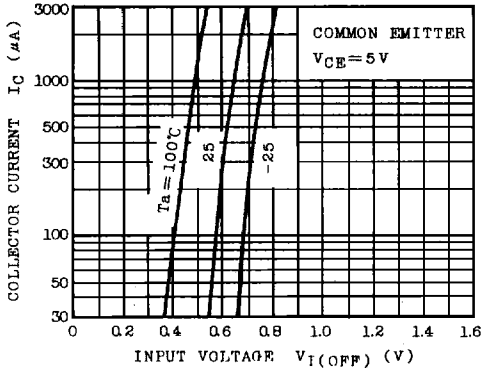
RN1011 $V_{CE(sat)} - I_C$



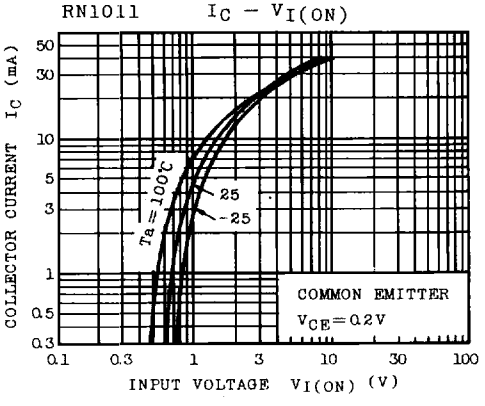
RN1010 $I_C - V_{I(ON)}$



RN1010 $I_C - V_{I(OFF)}$



RN1011 $I_C - V_{I(ON)}$



RN1011 $I_C - V_{I(OFF)}$