

NEC

SILICON TRANSISTOR
2SA675PNP SILICON EPITAXIAL TRANSISTOR
FOR DRIVING FLUORESCENT INDICATOR PANNEL

The 2SA675 is a resin sealed mold transistor and is ideal for dynamic drivers of counting indicator pannel such as fluorescent indicator pannel due to high voltage.

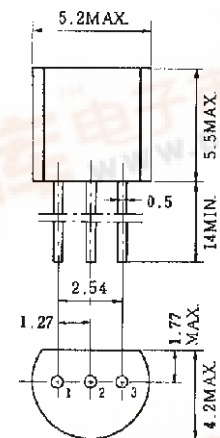
- High voltage
 $V_{CBO} > -80\text{ V}$, $V_{CER} > -80\text{ V}$
- Excellent linearity for current of DC current gain

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	-80	V
Collector to emitter voltage	V_{CER}^*	-80	V
Emitter to base voltage	V_{EBO}	-5.0	V
Collector current	I_C	-100	mA
Total power dissipation	P_T	250	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

* $R_{BE} = 30\text{ k}\Omega$

PACKAGE DRAWING (UNIT: mm)



Electrode Connection

1. Emitter
 2. Collector
 3. Base
- EIAJ : SC-43
JEDEC : TO-92
IEC : PA33

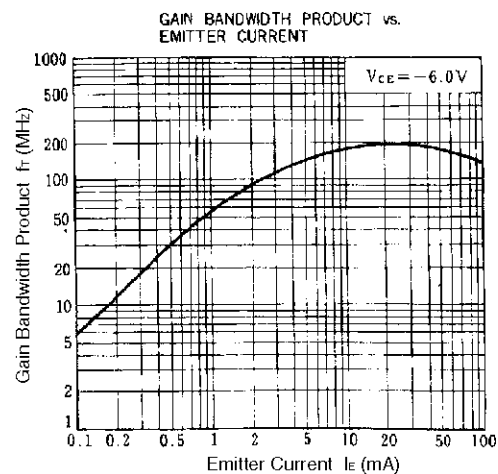
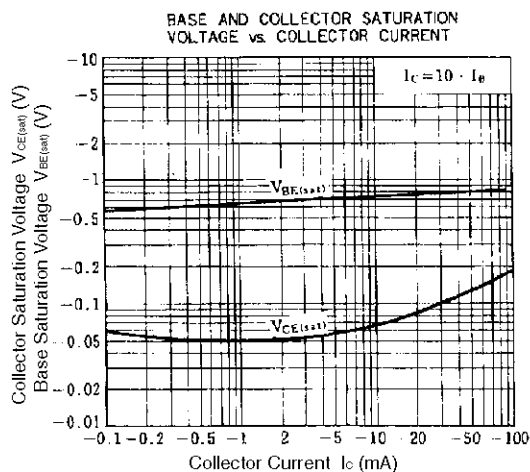
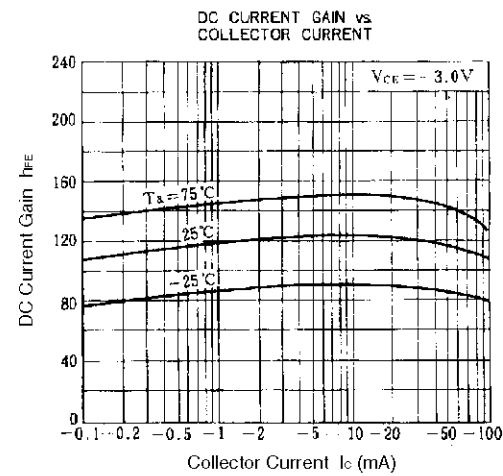
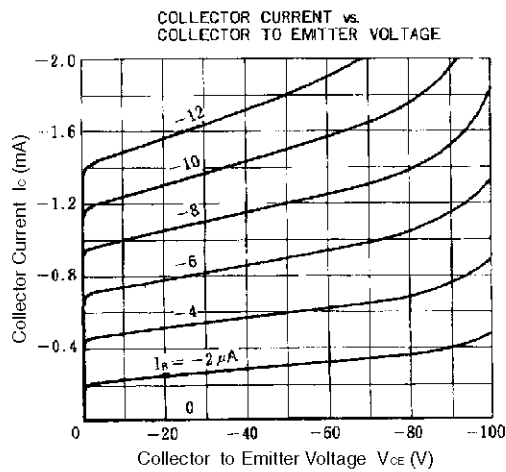
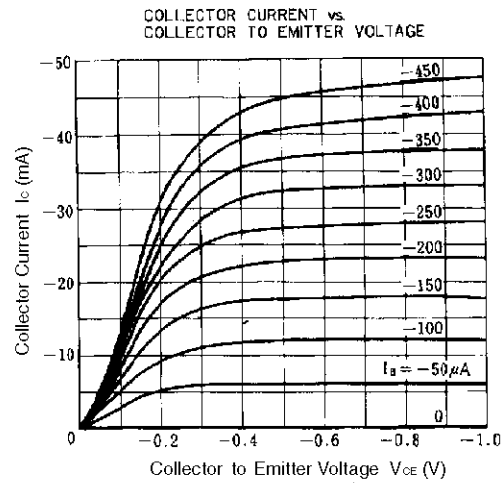
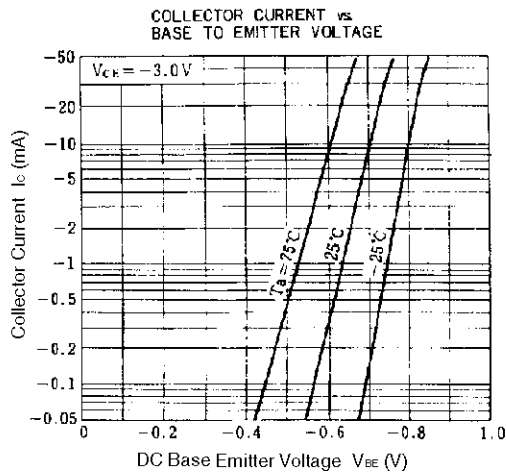
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

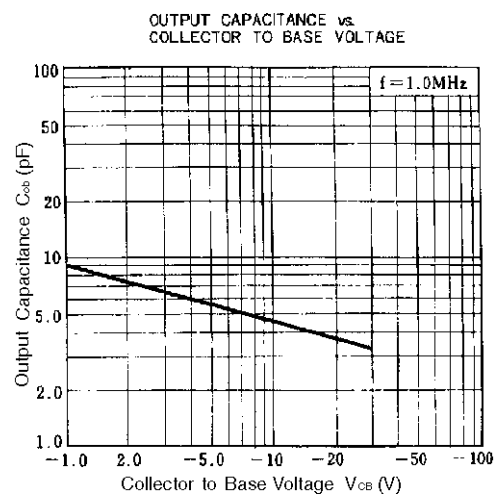
Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -60\text{ V}$, $I_E = 0$			-1.0	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -3.0\text{ V}$, $I_C = 0$			-1.0	μA
DC current gain	h_{FE1}	$V_{CE} = -3.0\text{ V}$, $I_C = -1.0\text{ mA}$	60	120		
DC current gain	h_{FE2}	$V_{CE} = -3.0\text{ V}$, $I_C = -20\text{ mA}$	50	120	300	
Collector saturation voltage	$V_{CE(sat)}$	$I_C = -20\text{ mA}$, $I_B = -1.0\text{ mA}$		-0.10	-1.50	V
Base saturation voltage	$V_{BE(sat)}$	$I_C = -20\text{ mA}$, $I_B = -1.0\text{ mA}$		-0.74	-1.20	V
Gain bandwidth product	f_r	$V_{CE} = -6.0\text{ V}$, $I_E = 10\text{ mA}$	100	170		MHz
Output capacitance	C_{ob}	$V_{CB} = -10\text{ V}$, $I_E = 0$, $f = 1.0\text{ MHz}$		4.5	10	pF
Storage time	t_{stg}	Refer to the test circuit.		0.5	1.0	μs

hFE CLASSIFICATION

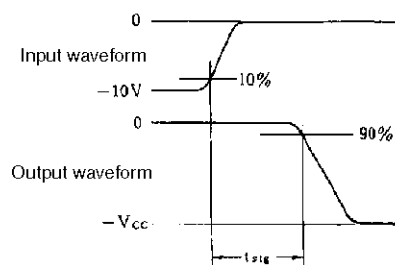
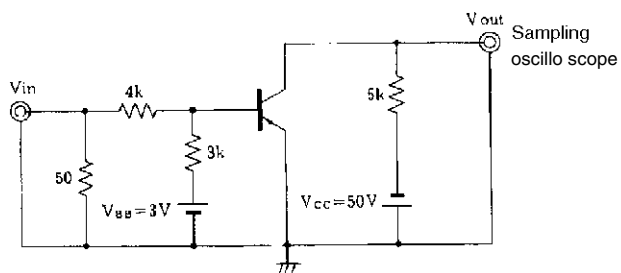
Marking	L	K	U
hFE2	50 to 125	80 to 200	120 to 300

TYPICAL CHARACTERISTICS (Ta = 25°C)





SWITCHING TIME TEST CIRCUIT



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