

PNP SILICON EPITAXIAL TRANSISTOR  
FOR DRIVING FLUORESCENT INDICATOR PANEL

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

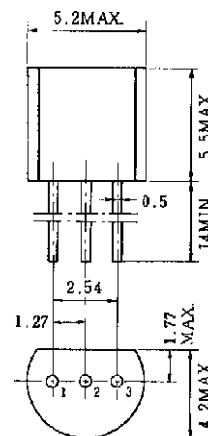
- High voltage  
 $V_{CBO} > -80\text{ V}$ ,  $V_{CER} > -80\text{ V}$
- Excellent linearity for current of DC current gain

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

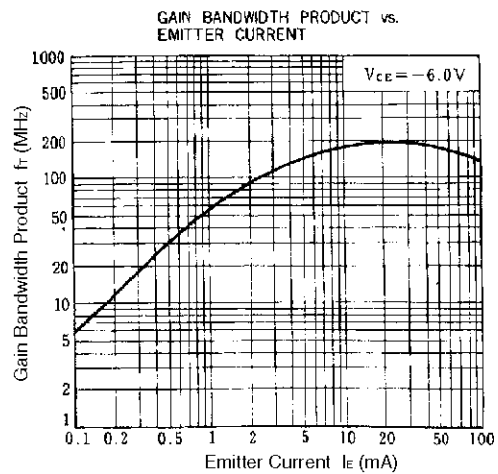
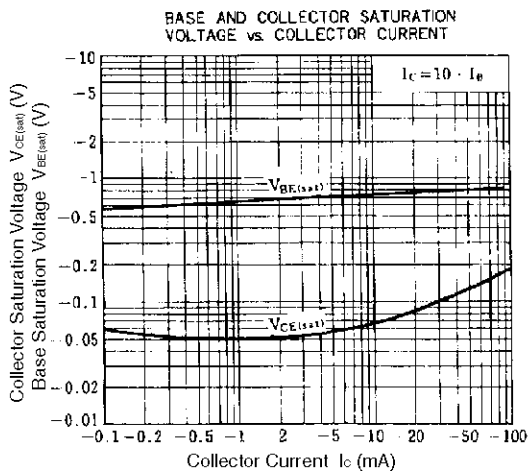
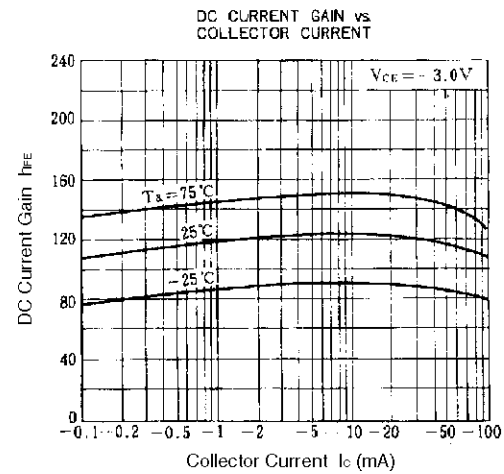
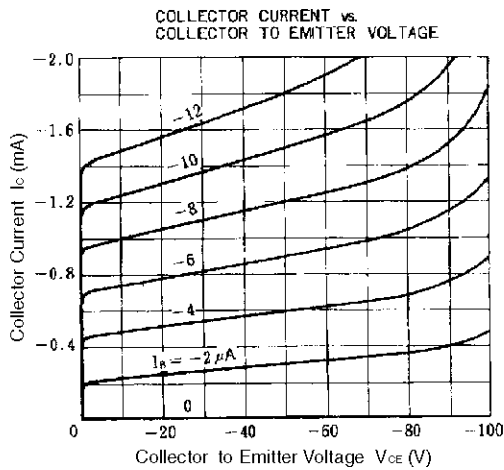
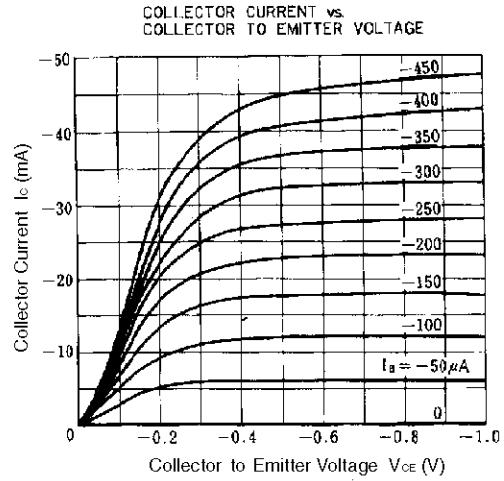
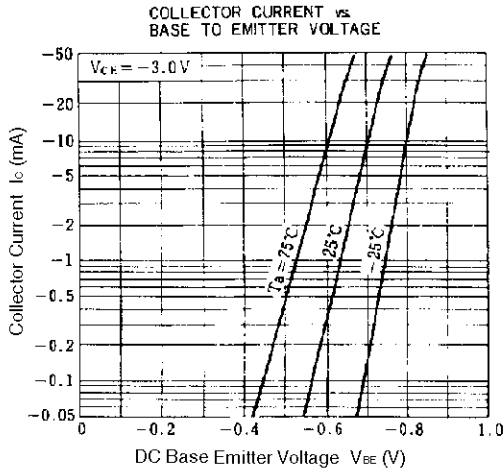
Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = -60\text{ V}$ , $I_E = 0$			-1.0	$\mu\text{A}$
Emitter cutoff current	$I_{EBO}$	$V_{EB} = -3.0\text{ V}$ , $I_C = 0$			-1.0	$\mu\text{A}$
DC current gain	$h_{FE1}$	$V_{CE} = -3.0\text{ V}$ , $I_C = -1.0\text{ mA}$	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	$f_T$	$V_{CE} = -6.0\text{ V}$ , $I_E = 10\text{ mA}$	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	$\mu\text{s}$

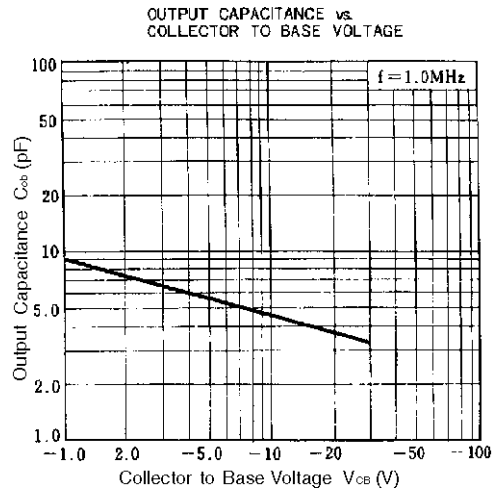
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**hFE CLASSIFICATION**

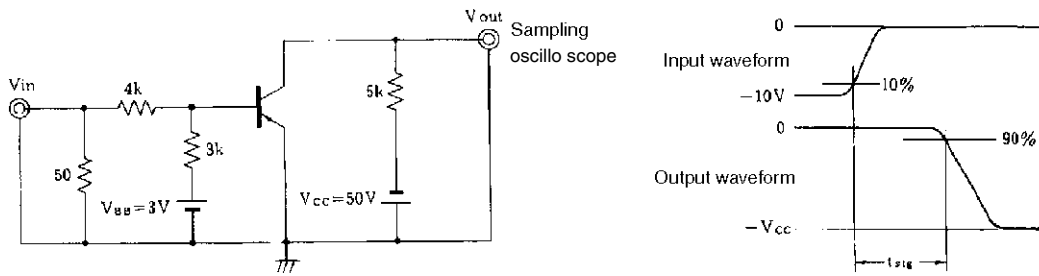
Marking	L	K	U
hFE2	50 to 125	80 to 200	120 to 300

**TYPICAL CHARACTERISTICS (Ta = 25°C)**





**SWITCHING TIME TEST CIRCUIT**



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