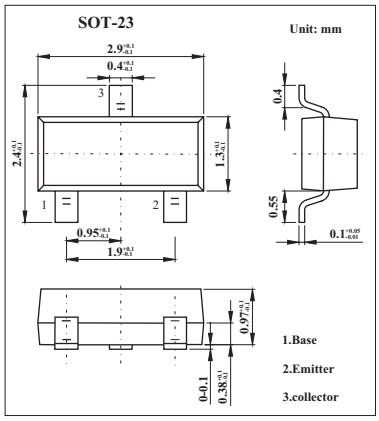
TY Semicondutor®

Product specification

2SC1621



■ Features

● High speed : t_{stg}=20ns MAX.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	40	V
Collector to emitter voltage	V_{CEO}	20	V
Emitter to base voltage	V_{EBO}	5	V
Collector current (DC)	I_C	200	mA
Total power dissipation	P_T	200	mW
Junction temperature	T_j	150	℃
Storage temperature range	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

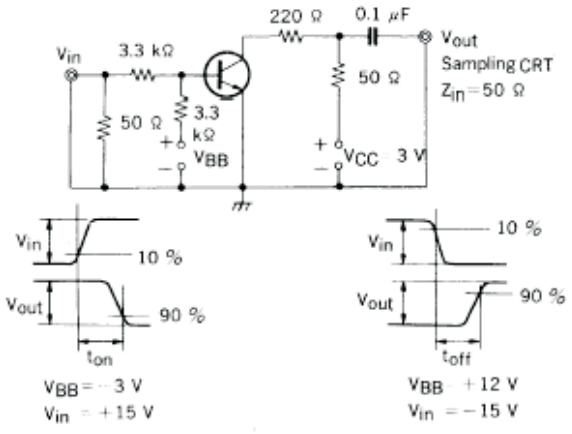
Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = 30V, I_E=0			100	nA
Emitter cutoff current	I_{EBO}	V_{EB} = 4V, I_C=0			100	nA
DC current gain *	h_{FE}	V_{CE} = 0.5V , I_C = 1mA	40	80	180	
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C = 10mA , I_B = 1mA		0.13	0.25	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	I_C = 10mA , I_B = 1mA		0.74	0.85	V
Gain bandwidth product	f_T	V_{CE} = 10V , I_E = -10mA	200	500		MHz
Output capacitance	C_{ob}	V_{CB} = 10V , I_E = 0 , f = 1.0MHz		3.0	6.0	pF
Turn-on time	t_{on}	See Test Circuit		12	20	ns
Storage time	t_{stg}			7	20	ns
Turn-off time	t_{off}			18	40	ns

*. PW≤350μs,duty cycle≤2%

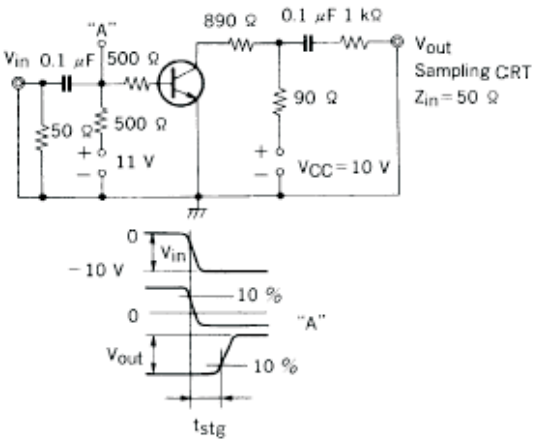
2SC1621

SWITCHING TIME TEST CIRCUIT

t_{on}, t_{off} TEST CIRCUIT



t_{stg} TEST CIRCUIT



■ hFE Classification

Marking	B2	B3	B4
hFE	40～80	60～120	90～180