

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE

2SC3327

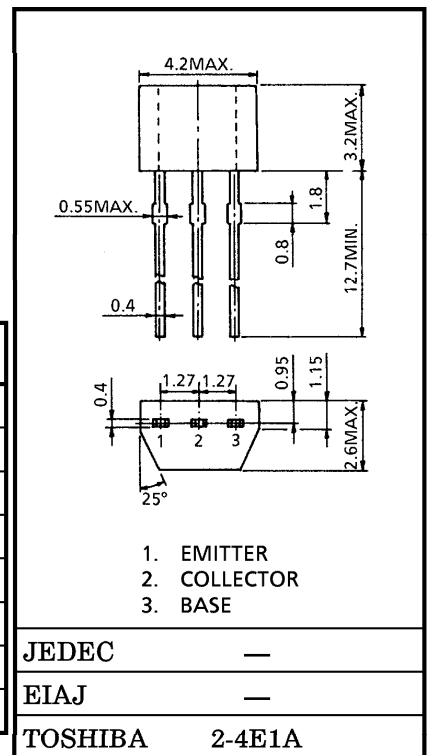
FOR MUTING AND SWITCHING APPLICATIONS

Unit in mm

- High Emitter-Base Voltage : $V_{EBO} = 25V$ (Min.)
- High Reverse h_{FE} : $h_{FE} = 150$ (Typ.) ($V_{CE} = -2V$, $I_C = -4mA$)
- Low On Resistance : $R_{ON} = 1\Omega$ (Typ.) ($I_B = 5mA$)
- Small Package

MAXIMUM RATINGS ($T_a = 25^\circ C$)

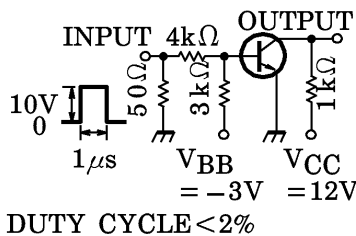
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	20	V
Emitter-Base Voltage	V_{EBO}	25	V
Collector Current	I_C	300	mA
Base Current	I_B	60	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	125	$^\circ C$
Storage Temperature Range	T_{stg}	-55~125	$^\circ C$



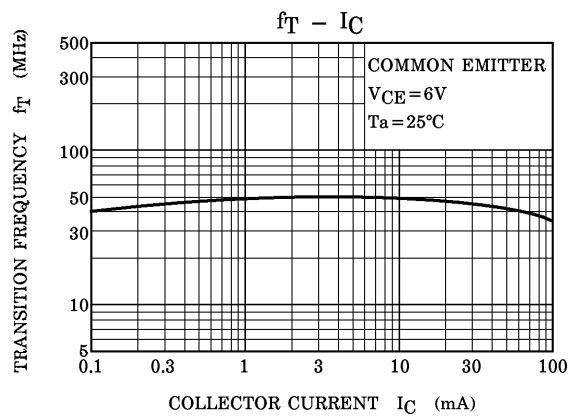
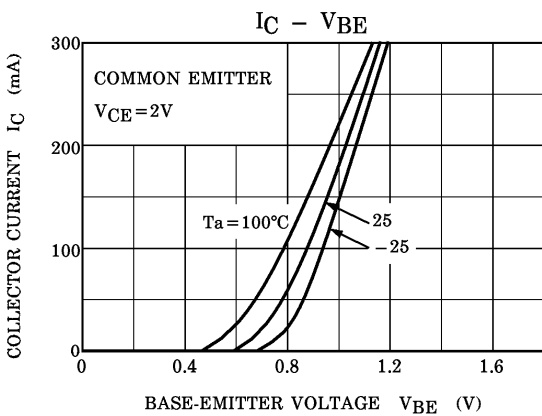
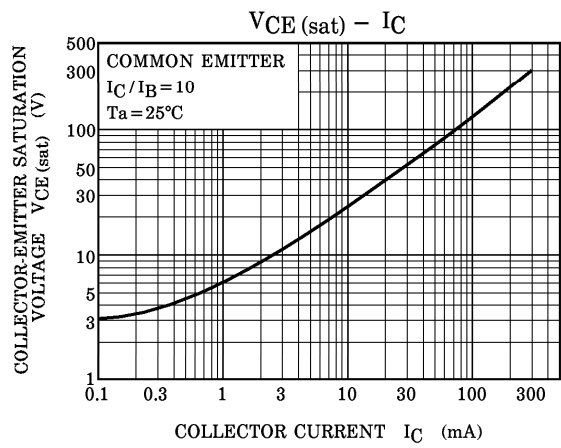
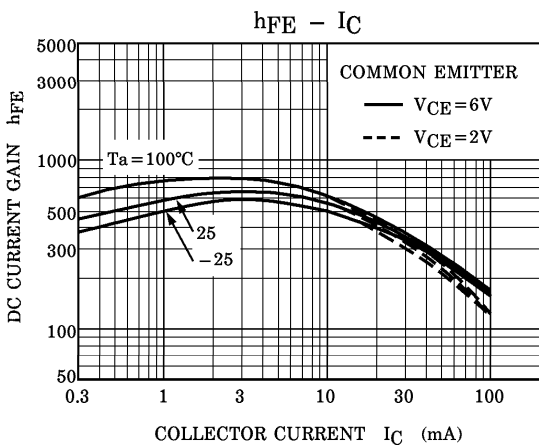
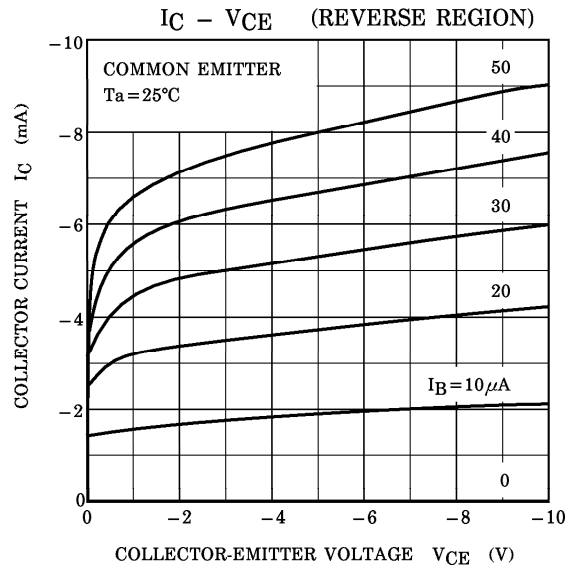
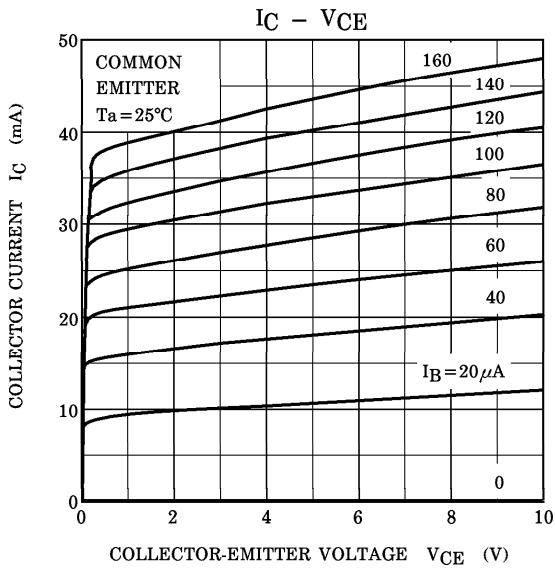
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

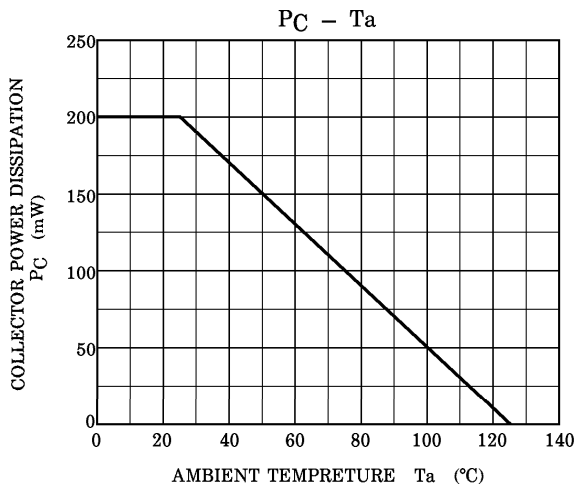
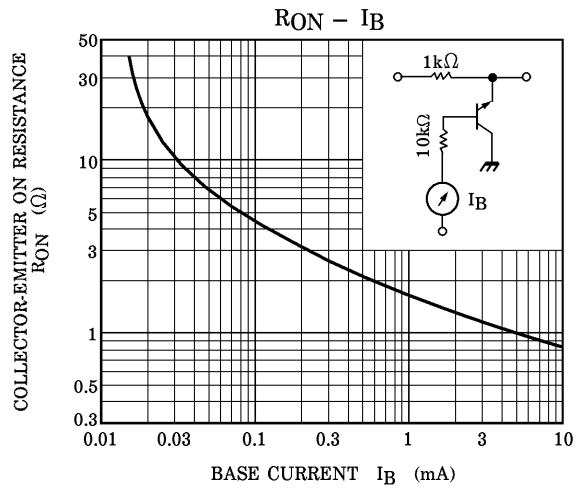
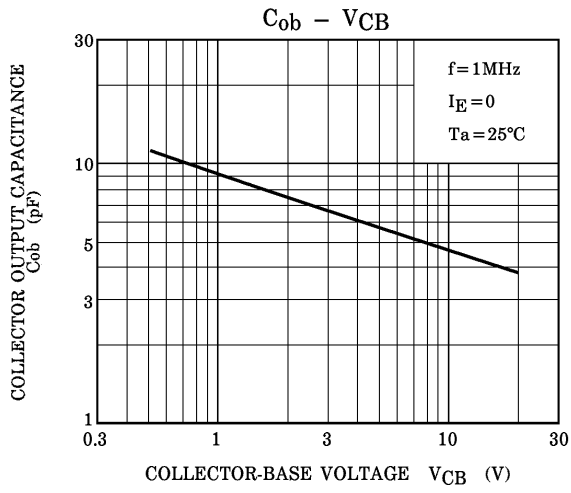
Weight : 0.13g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 50V$, $I_E = 0$	—	—	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 25V$, $I_C = 0$	—	—	0.1	μA
DC Current Gain	h_{FE} (Note)	$V_{CE} = 2V$, $I_C = 4mA$	200	—	1200	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 30mA$, $I_B = 3mA$	—	0.042	0.1	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 2V$, $I_C = 4mA$	—	0.61	—	V
Transition Frequency	f_T	$V_{CE} = 6V$, $I_C = 4mA$	—	30	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10V$, $I_E = 0$, $f = 1MHz$	—	4.8	7	pF
Switching Time	Turn-on Time	t_{on}	—	160	—	ns
	Storage Time	t_{stg}	—	500	—	
	Fall Time	t_f	—	130	—	



Note : h_{FE} Classification A : 200~700, B : 350~1200





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