

TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED (PCT PROCESS)

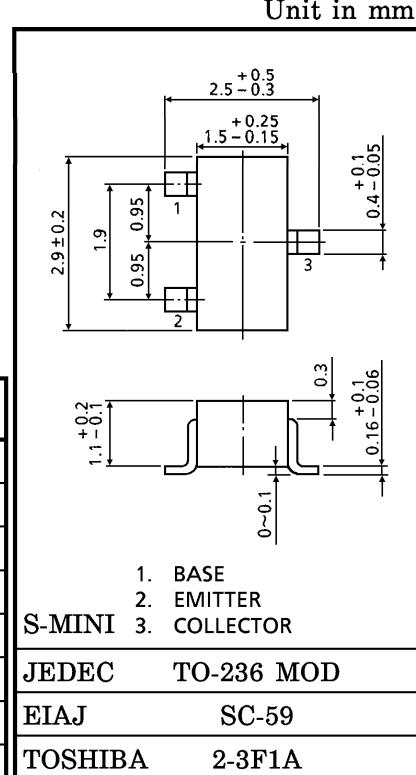
2SA1255

HIGH VOLTAGE SWITCHING APPLICATIONS

- High Voltage : $V_{CBO} = -200V$ (Min.)
 $V_{CEO} = -200V$ (Min.)
- Small Package
- Complementary to 2SC3138

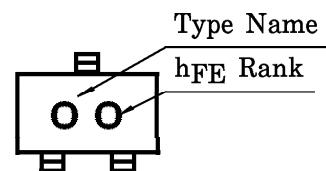
MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-200	V
Collector-Emitter Voltage	V_{CEO}	-200	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-50	mA
Base Current	I_B	-20	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	-55~125	°C



Weight : 0.012g

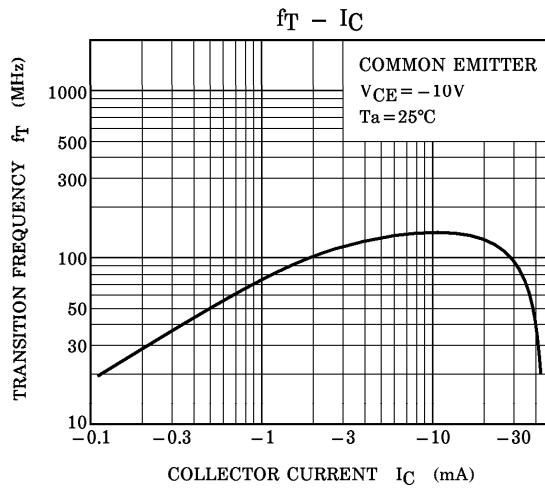
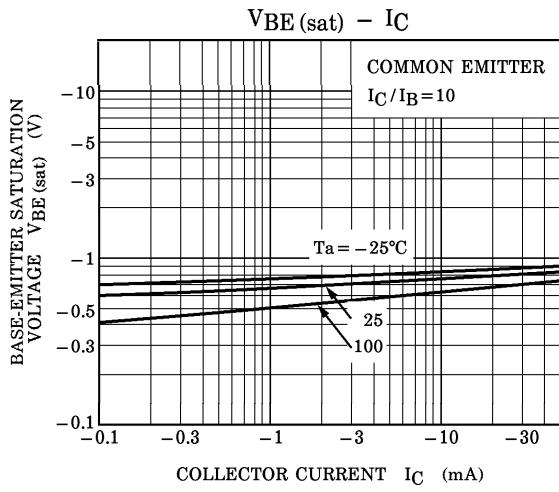
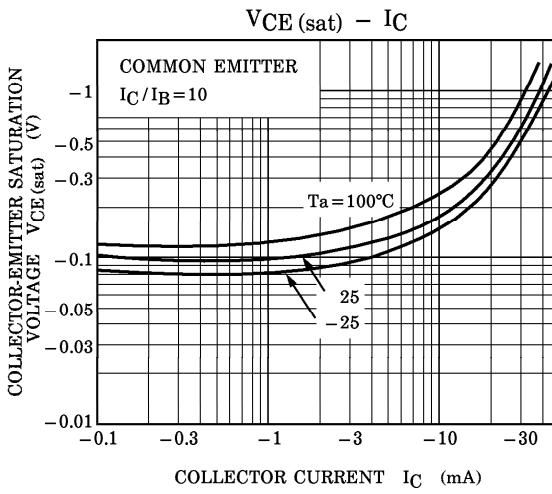
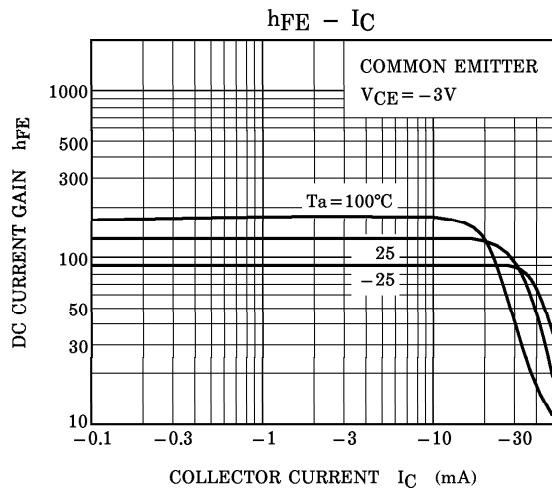
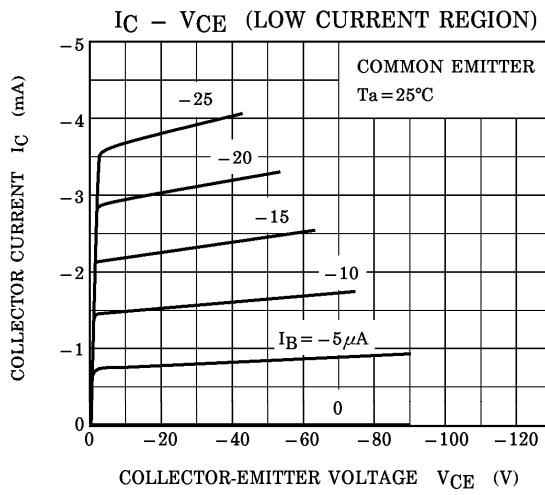
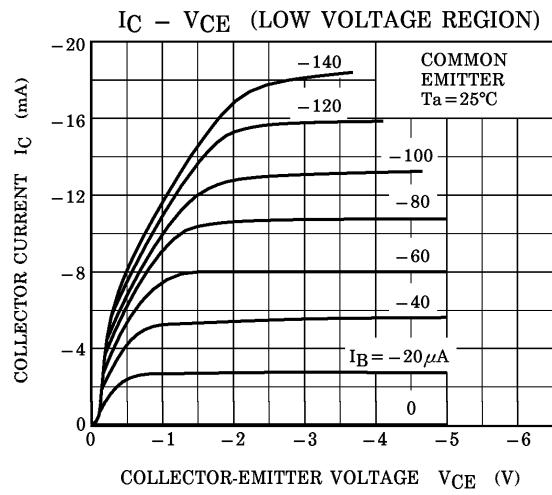
Marking

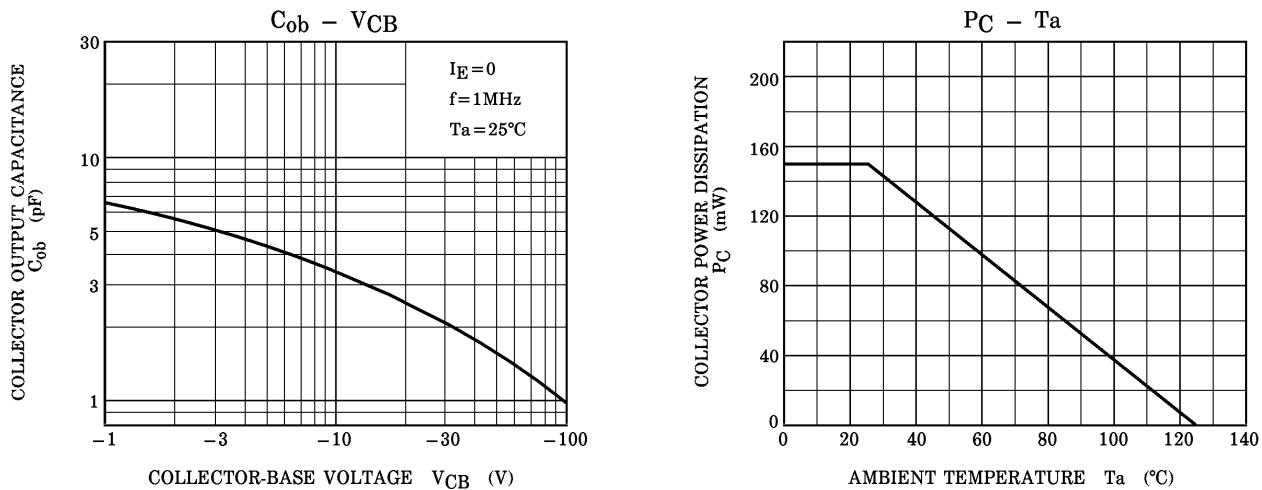


ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Collector Cut-off Current	I _{CBO}	V _{CB} = -200V, I _E = 0	—	—	-0.1	μA	
Emitter Cut-off Current	I _{EBO}	V _{EB} = -5V, I _C = 0	—	—	-0.1	μA	
Collector-Base Breakdown Voltage	V (BR) CBO	I _C = -0.1mA, I _E = 0	-200	—	—	V	
Collector-Emitter Breakdown Voltage	V (BR) CEO	I _C = -1mA, I _B = 0	-200	—	—	V	
DC Current Gain	^{h_{FE}} (Note)	V _{CE} = -3V, I _C = -10mA	70	—	240		
Collector-Emitter Saturation Voltage	V _{CE} (sat)	I _C = -10mA, I _B = -1mA	—	-0.2	-1	V	
Base-Emitter Saturation Voltage	V _{BE} (sat)	I _C = -10mA, I _B = -1mA	—	-0.75	-1.5	V	
Transition Frequency	f _T	V _{CE} = -10V, I _C = -2mA	50	100	—	MHz	
Collector Output Capacitance	C _{ob}	V _{CB} = -10V, I _E = 0, f = 1MHz	—	3	7	pF	
Switching Time	Turn-on Time	t _{on}	V _{CC} = -50V, I _C = -6mA -I _{B1} = I _{B2} = 0.6mA PULSE WIDTH = 5μs DUTY CYCLE ≤ 2%	—	0.3	—	μs
	Storage Time	t _{stg}		—	2	—	μs
	Fall Time	t _f		—	0.4	—	μs

Note : h_{FE} Classification O : 70~140, Y : 120~240





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