TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1483

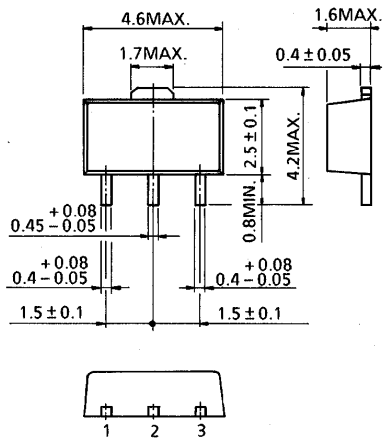
HIGH FREQUENCY AMPLIFIER APPLICATIONS

VIDEO AMPLIFIER APPLICATIONS

HIGH SPEED SWITCHING APPLICATIONS

- High Transition Frequency : $f_T = 200\text{MHz}$ (Typ.)
- Low Collector Output Capacitance : $C_{ob} = 3.5\text{pF}$ (Typ.)
- Complementary to 2SC3803

Unit in mm



1. BASE
2. COLLECTOR (HEAT SINK)
3. EMITTER

PW-MINI	
JEDEC	—
JEITA	SC-62
TOSHIBA	2-5K1A

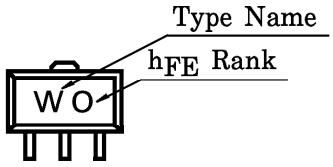
Weight : 0.05g (Typ.)

MAXIMUM RATINGS (Ta = 25°C)

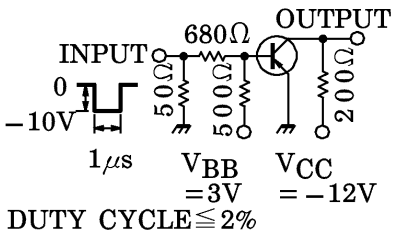
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	−60	V
Collector-Emitter Voltage	V_{CEO}	−45	V
Emitter-Base Voltage	V_{EBO}	−5	V
Continuous Collector Current	I_C	−200	mA
Continuous Base Current	I_B	−50	mA
Collector Power Dissipation	P_C	500	mW
	P_C*	1000	
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	−55~150	°C

* : Mounted on ceramic substrate ($250\text{mm}^2 \times 0.8\text{t}$)

MARKING

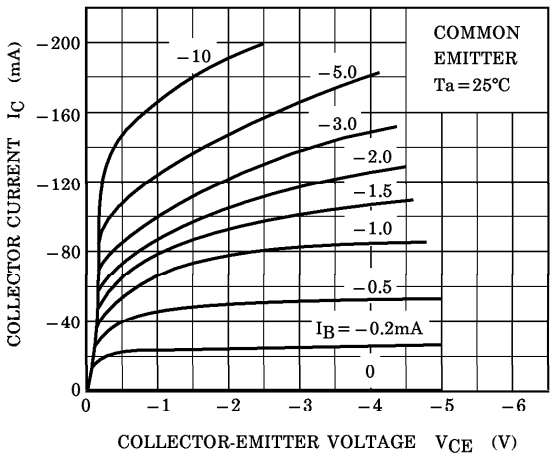


ELECTRICAL CHARACTERISTICS (Ta = 25°C)

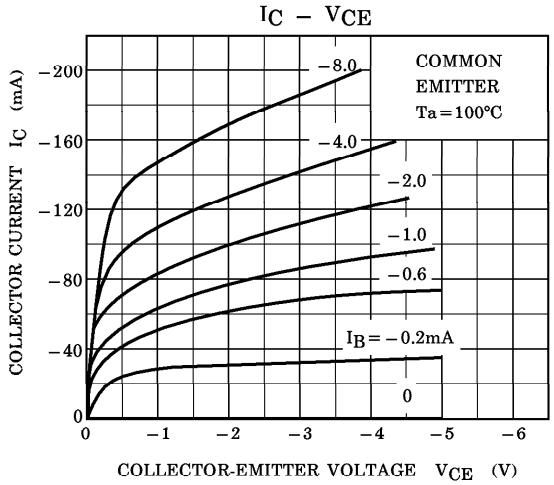
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB} = -45V$, $I_E = 0$	—	—	−0.1	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB} = -5V$, $I_C = 0$	—	—	−0.1	μA
DC Current Gain		$h_{FE\,(1)}$ (Note)	$V_{CE} = -1V$, $I_C = -10mA$	40	—	240	
		$h_{FE\,(2)}$	$V_{CE} = -3V$, $I_C = -200mA$	20	—	—	
Collector-Emitter Saturation Voltage		$V_{CE\,(sat)}$	$I_C = -100mA$, $I_B = -10mA$	—	—	−0.3	V
Base-Emitter Saturation Voltage		$V_{BE\,(sat)}$	$I_C = -100mA$, $I_B = -10mA$	—	—	−1.0	V
Transition Frequency		f_T	$V_{CE} = -10V$, $I_C = -10mA$	100	200	—	MHz
Input Impedance (Real Part)		$Re\,(h_{ie})$	$V_{CE} = -10V$, $I_E = 10mA$, $f = 200MHz$	—	—	120	Ω
Collector Output Capacitance		C_{ob}	$V_{CB} = -10V$, $I_E = 0$, $f = 1MHz$	—	3.5	5	pF
Switching Time	Turn-on Time	t_{on}		—	40	—	ns
	Storage Time	t_{stg}		—	250	—	
	Fall Time	t_f		—	30	—	

Note : $h_{FE\,(1)}$ Classification R : 40~80, O : 70~140, Y : 120~240

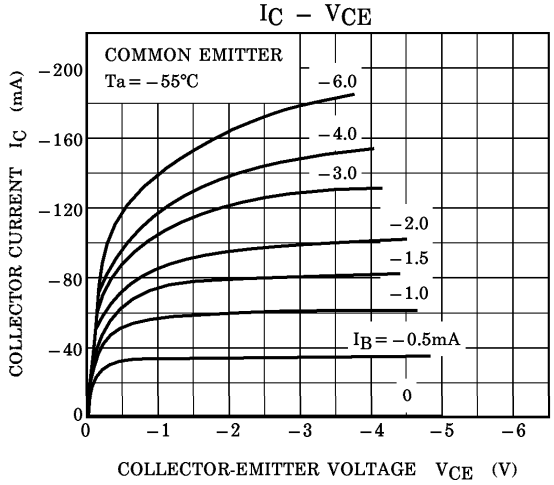
$I_C - V_{CE}$



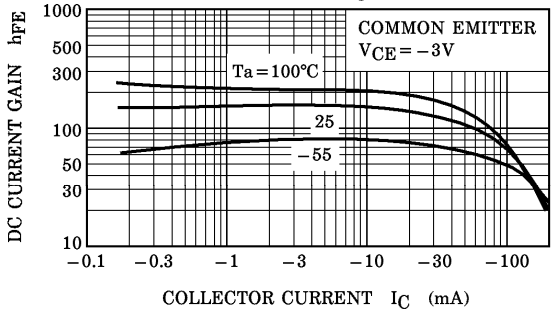
$I_C - V_{CE}$



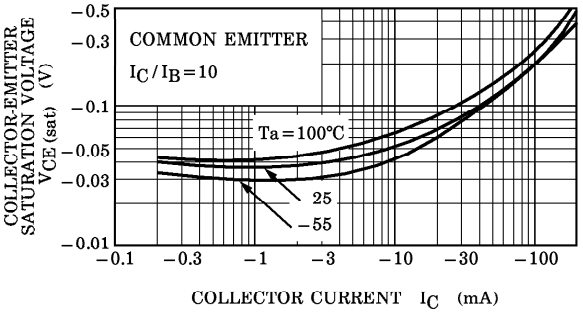
$I_C - V_{CE}$



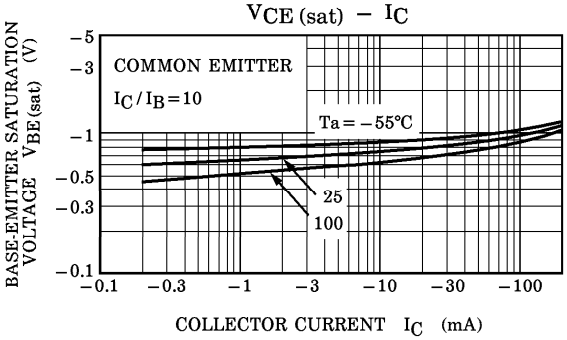
$h_{FE} - I_C$



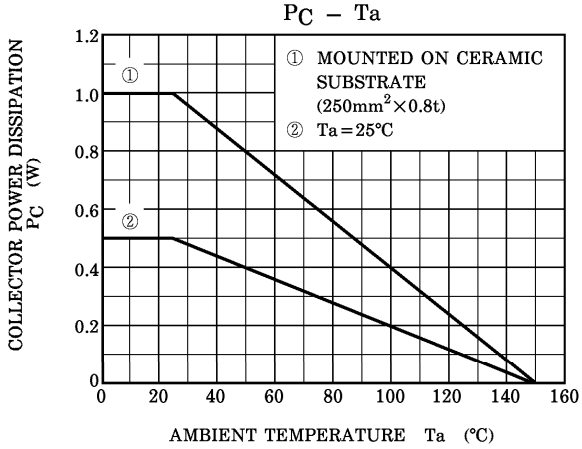
$V_{CE\,(sat)} - I_C$



$V_{CE\,(sat)} - I_C$



$P_C - Ta$



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