TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE (PCT PROCESS)

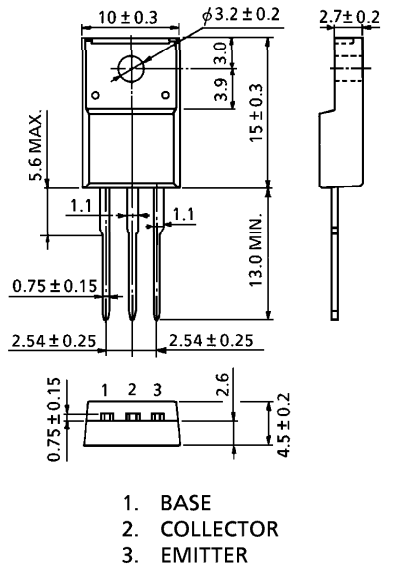
2SC2073A

POWER AMPLIFIER APPLICATIONS

VERTICAL OUTPUT APPLICATIONS

- Wide Safe Operating Area.
- Complementary to 2SA940A

Unit in mm



JEDEC	—
JEITA	SC-67
TOSHIBA	2-10R1A

Weight : 1.7g (Typ.)

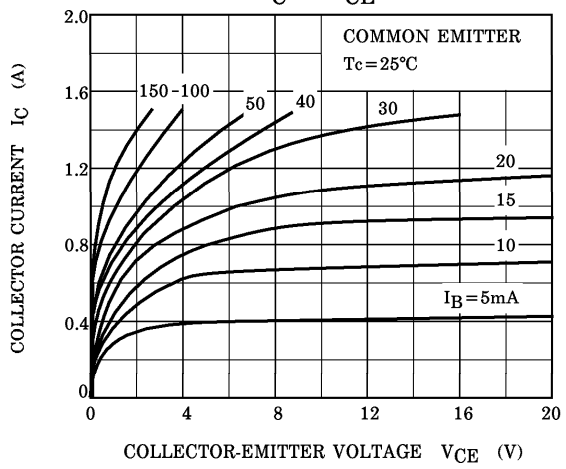
MAXIMUM RATINGS (Tc = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	150	V
Collector-Emitter Voltage		V_{CEO}	150	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current		I_C	1.5	A
Base Current		I_B	0.5	A
Collector Power Dissipation	Ta = 25°C	P_C	2.0	W
	Tc = 25°C		25	
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	−55~150	°C

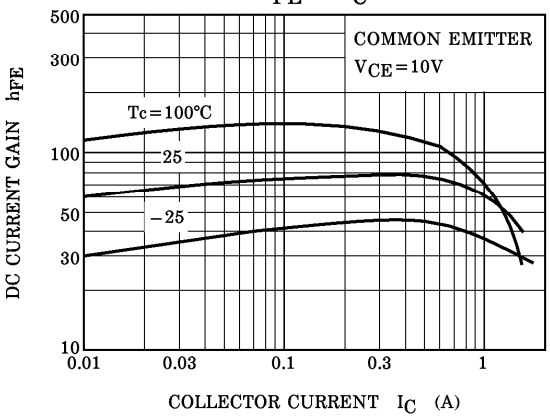
ELECTRICAL CHARACTERISTICS (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB} = 120V, I_E = 0	—	—	10	μA
Emitter Cut-off Current	I_{EBO}	V_{EB} = 5V, I_C = 0	—	—	10	μA
DC Current Gain	h_{FE}	V_{CE} = 10V, I_C = 500mA	40	75	140	
Collector-Emitter Saturation Voltage	$V_{CE\ (sat)}$	I_C = 500mA, I_B = 50mA	—	—	1.5	V
Base-Emitter Voltage	V_{BE}	V_{CE} = 10V, I_C = 500mA	0.65	0.75	0.85	V
Transition Frequency	f_T	V_{CE} = 10V, I_C = 500mA	—	4	—	MHz
Collector Output Capacitance	C_{ob}	V_{CB} = 10V, I_E = 0, f = 1MHz	—	35	—	pF

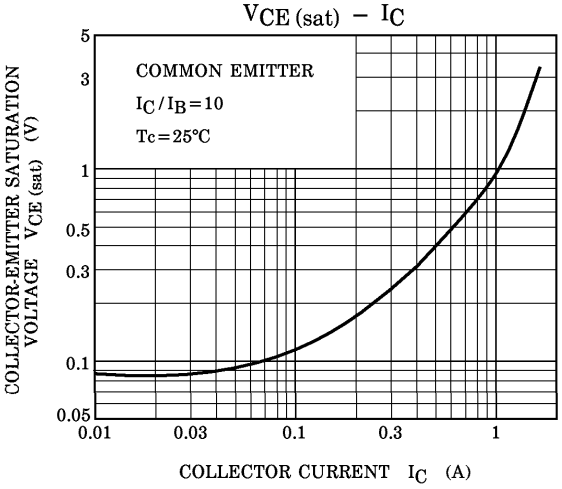
I_C – V_{CE}



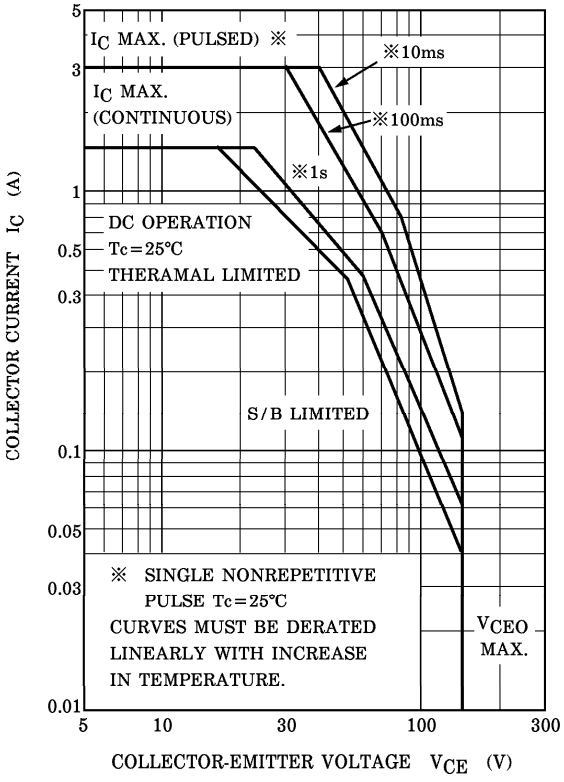
h_{FE} – I_C



$V_{CE\,(sat)}$ – I_C



SAFE OPERATING AREA



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