

TOSHIBA

2SC4881

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE

2SC4881

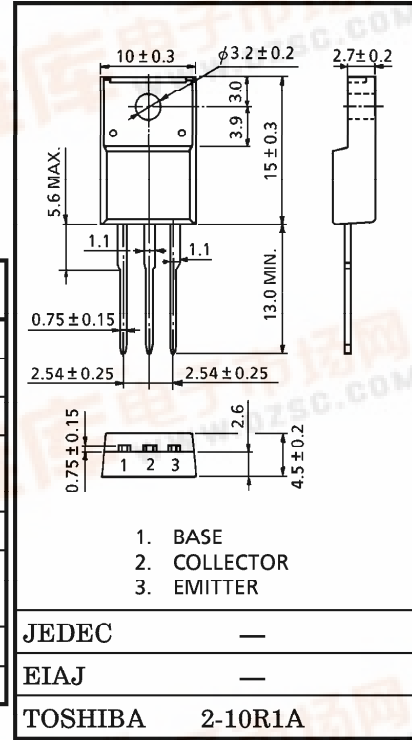
HIGH CURRENT SWITCHING APPLICATIONS.

Unit in mm

- Low Saturation Voltage
: $V_{CE(sat)} = 0.4V$ (MAX.)
- High Speed Switching Time : $t_{stg} = 0.8\mu s$ (Typ.)

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	60	V
Collector-Emitter Voltage		V_{CEO}	50	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current	DC	I_C	5	A
	Pulse	I_{CP}	8	
Base Current		I_B	1	A
Collector Power Dissipation	Ta = 25°C	P_C	2.0	W
	Tc = 25°C		20	
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

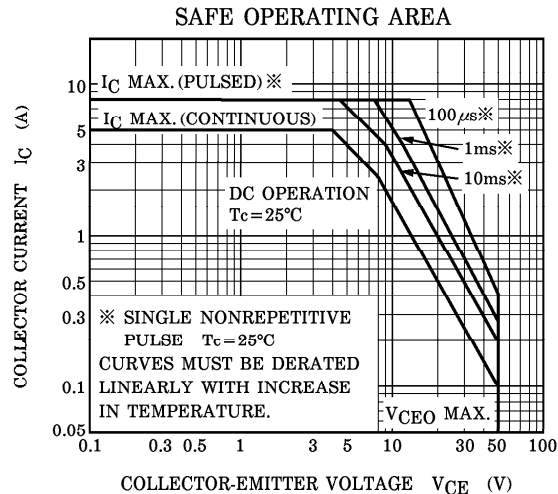
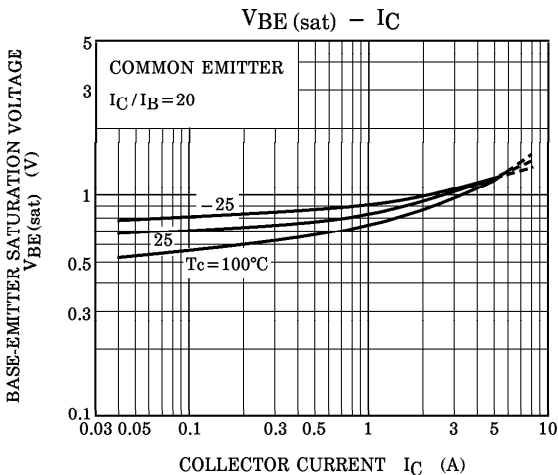
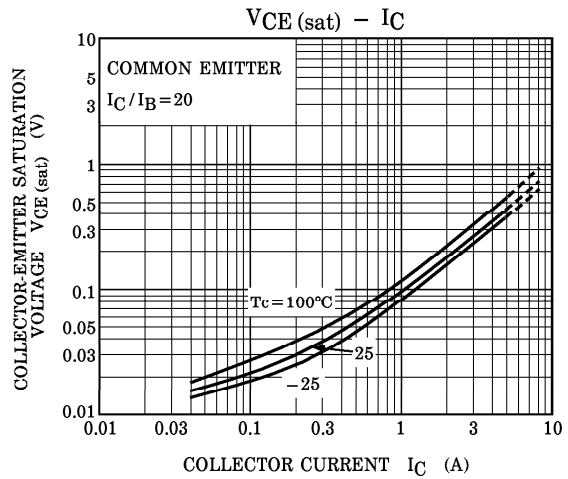
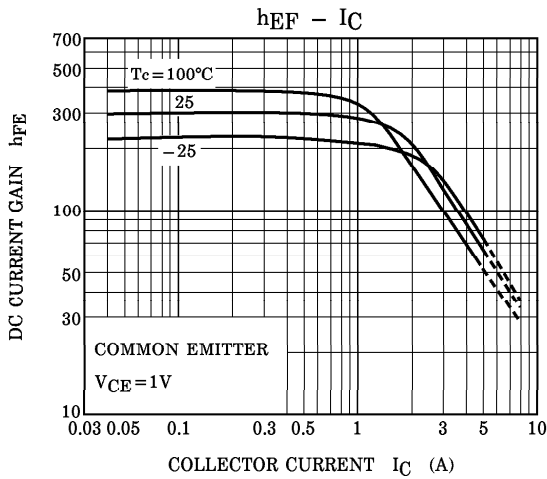
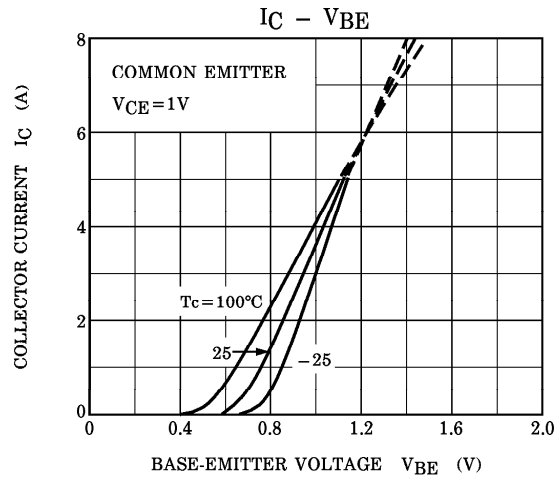
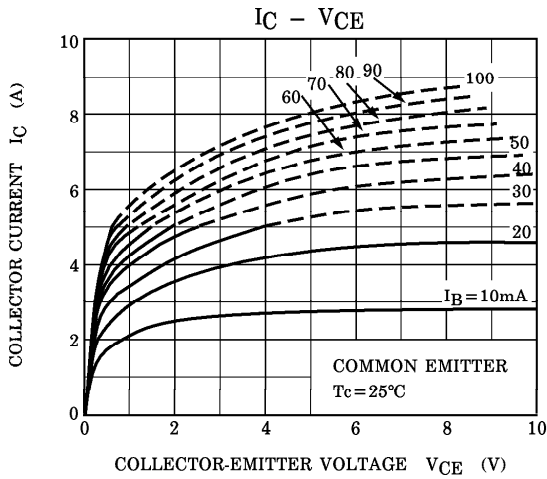
Weight : 1.7g (Typ.)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB} = 50V, I_E = 0$	—	—	1	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB} = 6V, I_C = 0$	—	—	1	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	50	—	—	V
DC Current Gain	$h_{FE(1)}$	h_{FE}	$V_{CE} = 1V, I_C = 1A$	100	—	320	
	$h_{FE(2)}$		$V_{CE} = 1V, I_C = 2.5A$	60	—	—	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C = 2.5A, I_B = 125mA$	—	0.25	0.4	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C = 2.5A, I_B = 125mA$	—	1.0	1.3	V
Transition Frequency		f_T	$V_{CE} = 4V, I_C = 1A$	—	100	—	MHz
Collector Output Capacitance		C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	—	45	—	pF
Switching Time	Turn-on Time	t_{on}		—	0.1	—	μs
	Storage Time	t_{stg}		—	0.8	—	
	Fall Time	t_f		—	1.0	—	

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