

TOSHIBA Transistor Silicon NPN Triple-Diffused Mesa Type

2SC6041

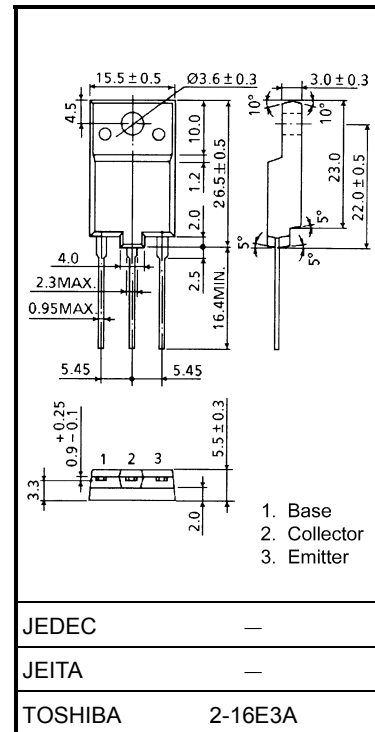
Horizontal Deflection Output for HDTV,
Digital TV, Projection TV.

Unit: mm

- High voltage : $V_{CBO} = 1700\text{ V}$
- Low saturation voltage : $V_{CE}(\text{sat}) = 1.5\text{ V (max)}$
- High speed : $t_f = 0.15\text{ }\mu\text{s (typ.)}$
- Collector metal (fin) is fully covered with mold resin.

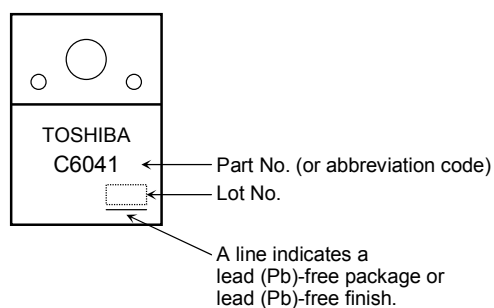
Maximum Ratings ($T_C = 25^\circ\text{C}$)

Characteristic		Symbol	Rating	Unit
Collector-base voltage		V_{CBO}	1700	V
Collector-emitter voltage		V_{CEO}	750	V
Emitter-base voltage		V_{EBO}	5	V
Collector current	DC	I_C	15	A
	Pulse	I_{CP}	30	
Base current		I_B	7.5	A
Collector power dissipation		P_C	70	W
Junction temperature		T_j	150	$^\circ\text{C}$
Storage temperature range		T_{stg}	-55 to 150	$^\circ\text{C}$



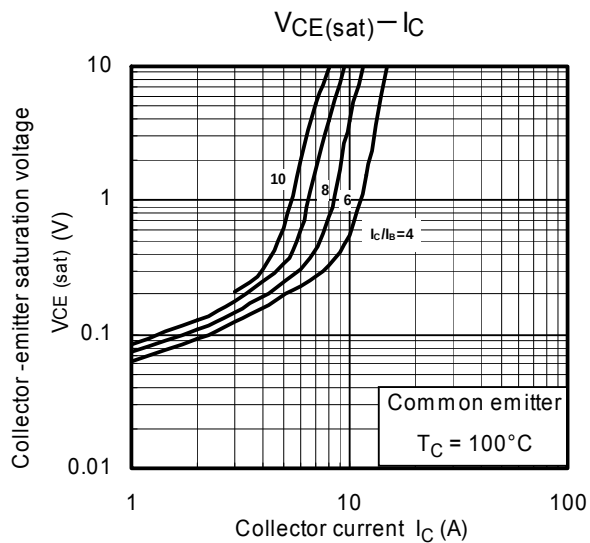
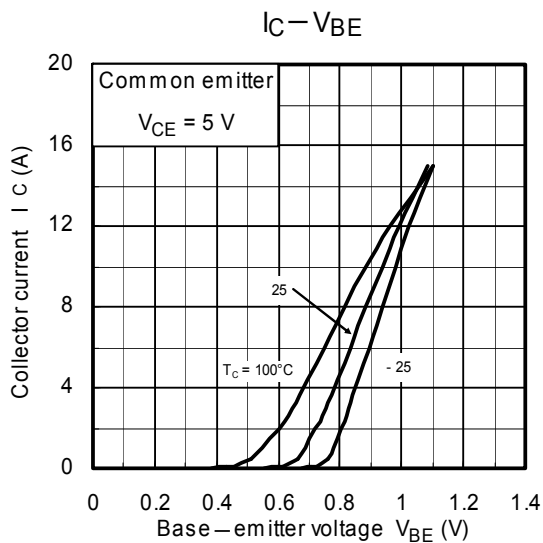
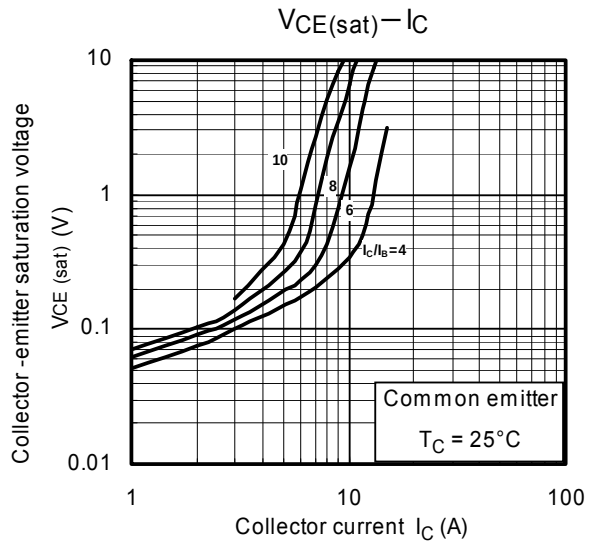
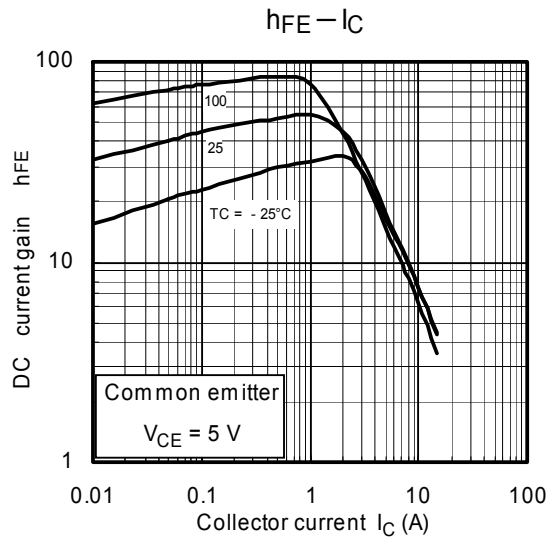
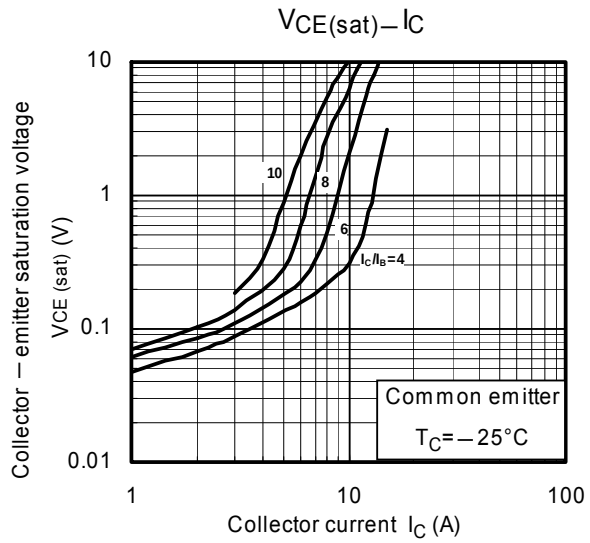
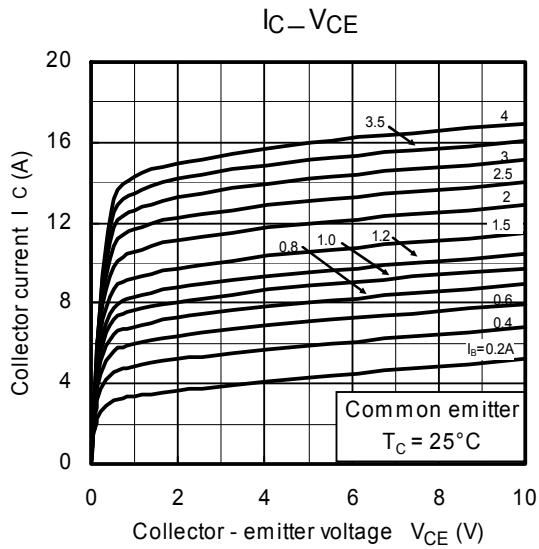
Weight: 5.5 g (typ.)

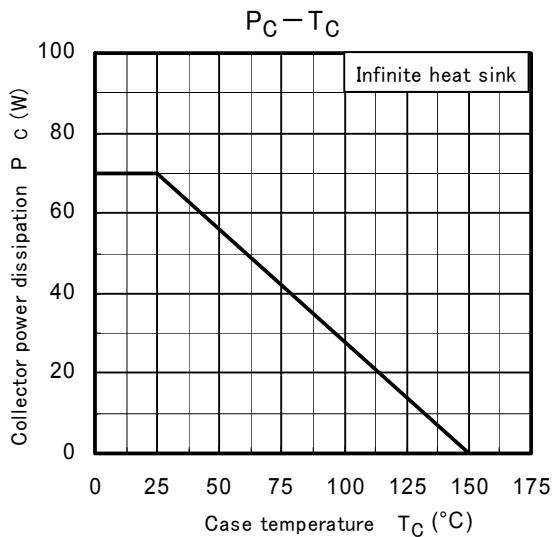
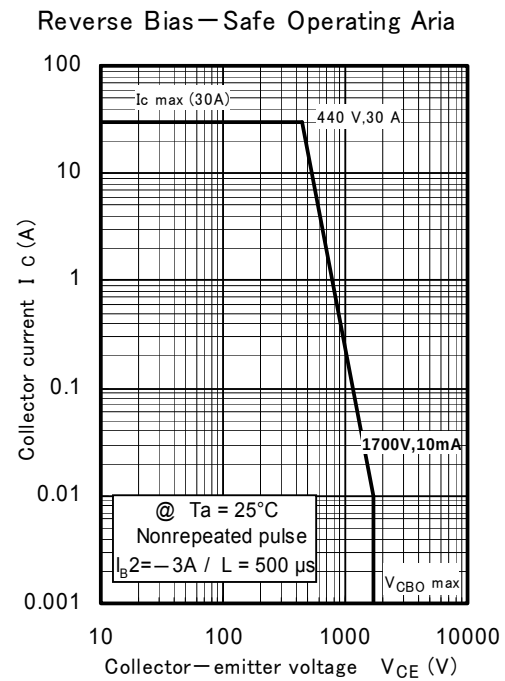
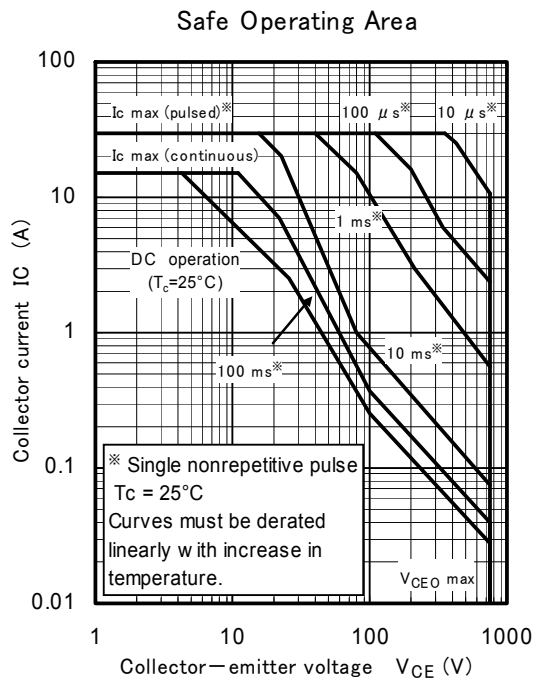
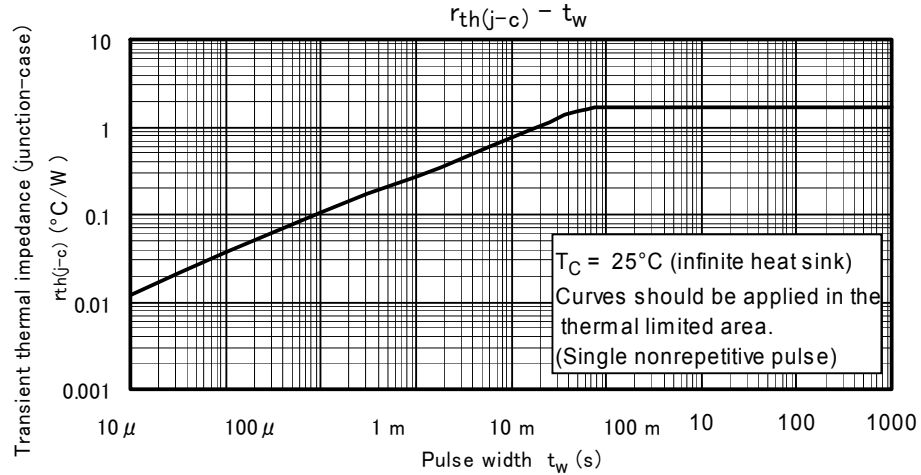
Marking



Electrical Characteristics (T_C = 25°C)

Characteristic		Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cutoff current		I _{CBO}	V _{CB} = 1700 V, I _E = 0	—	—	1	mA
Emitter cutoff current		I _{EBO}	V _{EB} = 5 V, I _C = 0	—	—	100	μA
Emitter–base breakdown voltage		V _(BR) EBO	I _E = 1 mA, I _B = 0	5	—	—	V
DC current gain		h _{FE} (1)	V _{CE} = 5 V, I _C = 2 A	30	—	60	—
		h _{FE} (2)	V _{CE} = 5 V, I _C = 8 A	8	—	12	
		h _{FE} (3)	V _{CE} = 5 V, I _C = 12 A	5	—	7	
Collector–emitter saturation voltage		V _{CE} (sat)	I _C = 12 A, I _B = 3 A	—	—	1.5	V
Base–emitter saturation voltage		V _{BE} (sat)	I _C = 12 A, I _B = 3 A	—	—	1.25	V
Transition frequency		f _T	V _{CE} = 10 V, I _C = 0.1 A	—	2	—	MHz
Collector output capacitance		C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	—	260	—	pF
Switching time	Storage time	t _{stg}	I _{CP} = 6 A, I _{B1} (end) = 0.8 A f _H = 32 kHz	—	4	—	μs
	Fall time	t _f		—	0.15	—	





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