

2SC5355

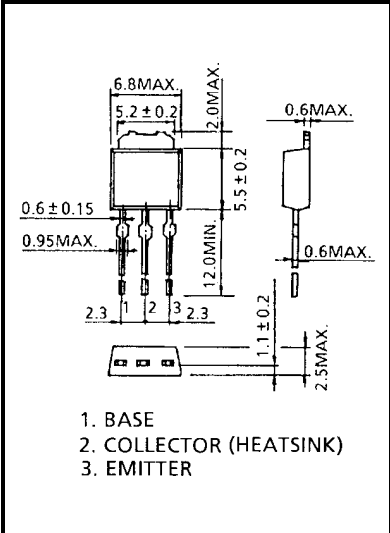
High Voltage Switching Applications
Switching Regulator Applications
DC-DC Converter Applications

- Excellent switching times: $t_r = 0.5 \mu s$ (max), $t_f = 0.3 \mu s$ (max)
- High collector breakdown voltage: $V_{CEO} = 400 V$
- High DC current gain: $h_{FE} = 20$ (min)

Maximum Ratings (Ta = 25°C)

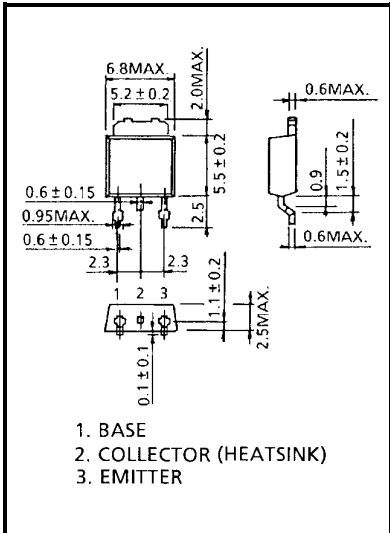
Characteristics		Symbol	Rating	Unit
Collector-base voltage		V_{CBO}	600	V
Collector-emitter voltage		V_{CEO}	400	V
Emitter-base voltage		V_{EBO}	7	V
Collector current	DC	I_C	5	A
	Pulse	I_{CP}	7	
Base current		I_B	1	A
Collector power dissipation	Ta = 25°C	P_C	1.5	W
	Tc = 25°C		25	
Junction temperature		T_j	150	°C
Storage temperature range		T_{stg}	-55~150	°C

Unit: mm



JEDEC	—
JEITA	—
TOSHIBA	2-7B5A

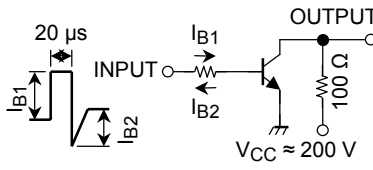
Weight: 0.36 g (typ.)



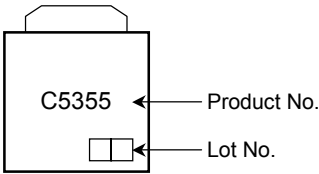
JEDEC	—
JEITA	—
TOSHIBA	2-7B6A

Weight: 0.36 g (typ.)

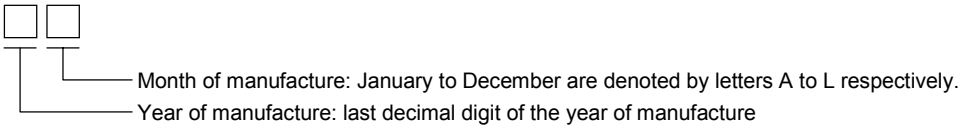
Electrical Characteristics (Ta = 25°C)

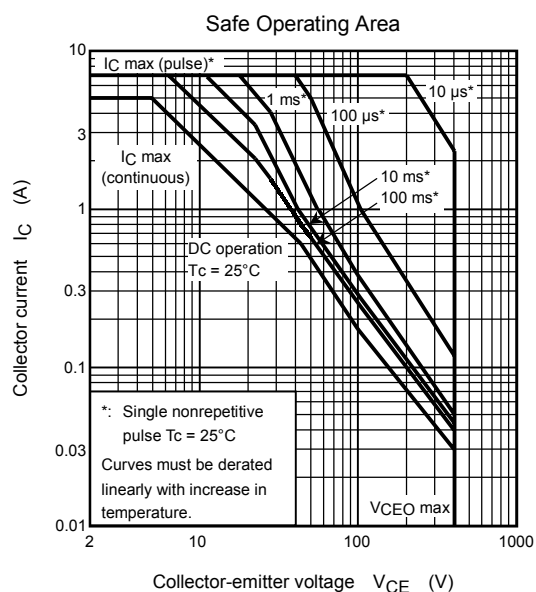
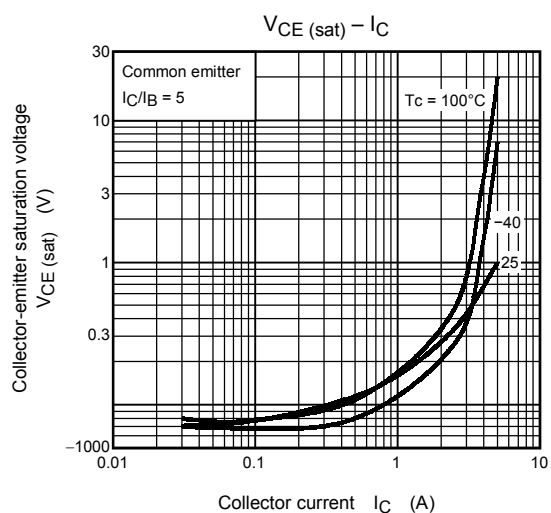
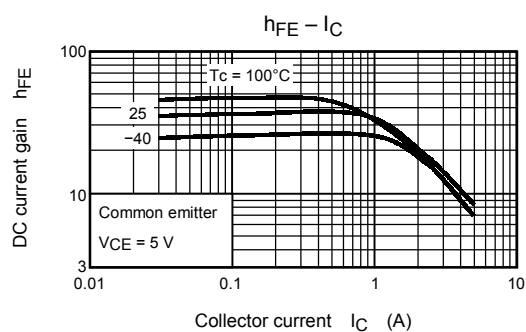
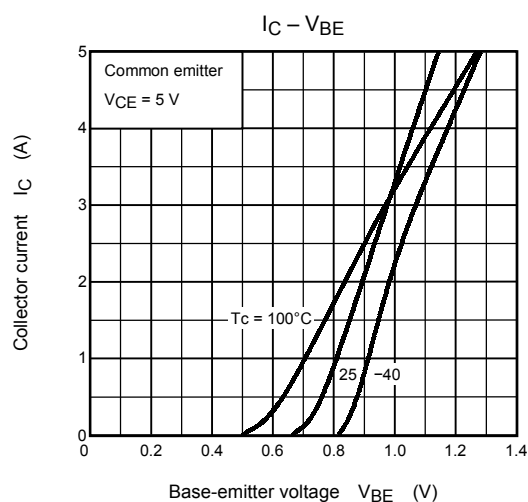
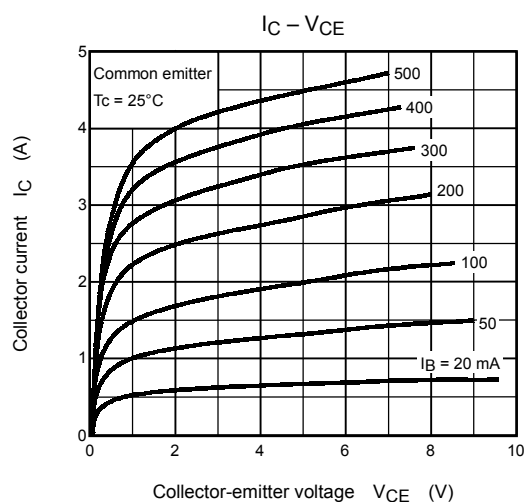
Characteristics		Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current		I_{CBO}	$V_{CB} = 480\text{ V}, I_E = 0$	—	—	100	μA
Emitter cut-off current		I_{EBO}	$V_{EB} = 7\text{ V}, I_C = 0$	—	—	10	μA
Collector-base breakdown voltage		$V_{(BR) CBO}$	$I_C = 1\text{ mA}, I_E = 0$	600	—	—	V
Collector-emitter breakdown voltage		$V_{(BR) CEO}$	$I_C = 10\text{ mA}, I_B = 0$	400	—	—	V
DC current gain		$h_{FE} (1)$	$V_{CE} = 5\text{ V}, I_C = 1\text{ mA}$	12	—	—	
		$h_{FE} (2)$	$V_{CE} = 5\text{ V}, I_C = 0.5\text{ A}$	20	—	65	
Collector-emitter saturation voltage		$V_{CE (sat)}$	$I_C = 2\text{ A}, I_B = 0.25\text{ A}$	—	—	1.0	V
Base-emitter saturation voltage		$V_{BE (sat)}$	$I_C = 2\text{ A}, I_B = 0.25\text{ A}$	—	—	1.3	V
Switching time	Rise time	t_r	 $I_{B1} = 0.25\text{ A}, I_{B2} = -0.5\text{ A}$ DUTY CYCLE $\leq 1\%$	—	—	0.5	μs
	Storage time	t_{stg}		—	—	2.0	
	Fall time	t_f		—	—	0.3	

Marking



Explanation of Lot No.





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