2SC2653, 2SC2653(H)

Silicon PNP Triple-Diffused Planar Type

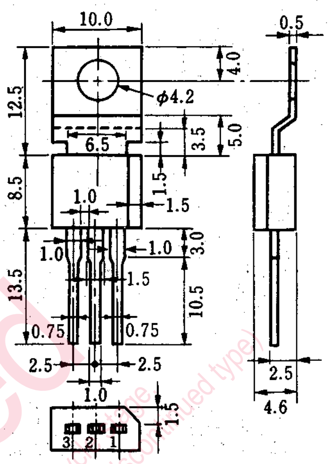
Horizontal Deflection Driver for Color TV set

■ Features

- High collector-emitter voltage (V_{CEO})
- Large collector power dissipation (P_C)

■ Package Dimensions

Unit : mm



1 : Emitter
2 : Collector(Fin)
3 : Base
JEDEC : TO-202

■ Absolute Maximum Ratings (Ta=25°C)

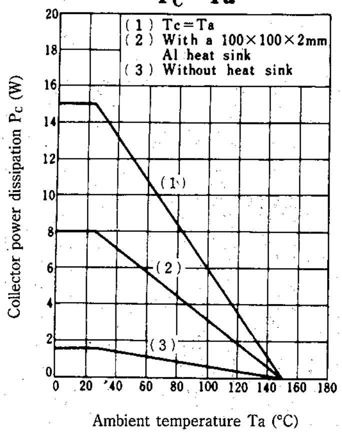
Item		Symbol	Value	Unit
Collector-base voltage	2SC2653	V_{CBO}	350	V
	2SC2653(H)		480	
Collector-emitter voltage		V_{CEO}	300	V
Emitter-base voltage		V_{EBO}	7.5	V
Collector current		I_C	200	mA
Collector power dissipation (Tc=25°C)		P_C	15	W
Junction temperature		T_j	150	℃
Storage temperature		T_{stg}	−55～+150	℃

■ Electrical Characteristics (Tc=25°C)

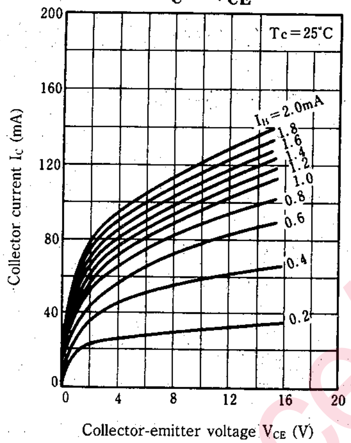
Item		Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current		I_{CBO}	V_{CB}=200 V, I_E=0			2	μA
Emitter cutoff current		I_{EBO}	V_{EB}=5 V, I_C=0			2	μA
Collector-base voltage	2SC2653	V_{CBO}	I_C=100 μA, I_E=0	350			V
	2SC2653(H)		I_C=100 μA, I_E=0, Ta=100 °C	480			
Collector-emitter voltage	2SC2653	V_{CEO}	I_C=5 mA, I_B=0	300			V
	2SC2653(H)		I_C=5 mA, I_B=0, Ta=100 °C	300			
Collector-emitter voltage		V_{CER}	I_C=100 μA, R_{BE}=1kΩ	350			V
Emitter-base voltage		V_{EBO}	I_E=100 μA, I_C=0	7.5			V
DC current gain		h_{FE}	V_{CE}=10 V, I_C=10 mA	40		250	
Collector-emitter saturation voltage		$V_{CE(sat)}$	I_C=50 mA, I_B=5 mA			1	V
Transition frequency		f_T	V_{CB}=30V, I_E=−10mA, f=200MHz	50			MHz
Collector output capacitance		C_{ob}	V_{CB}=50 V, I_E=0, f=1 MHz			4.5	pF
Storage time		t_{stg}	I_C=100 mA, I_{B1}=10 mA, I_{B2}=0	5		7.5	μs

Maintenance/ Discontinued

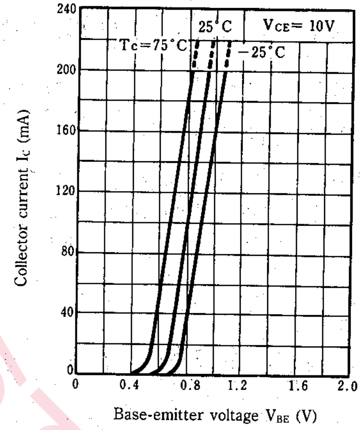
$P_C - T_a$



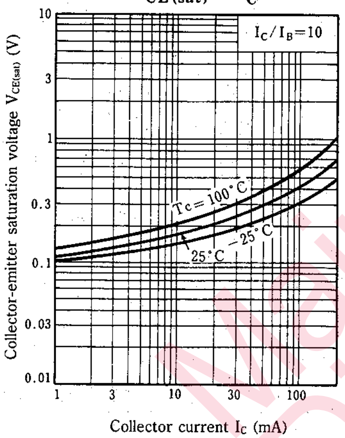
$I_C - V_{CE}$



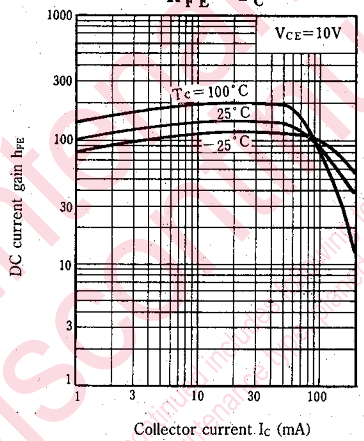
$I_C - V_{BE}$



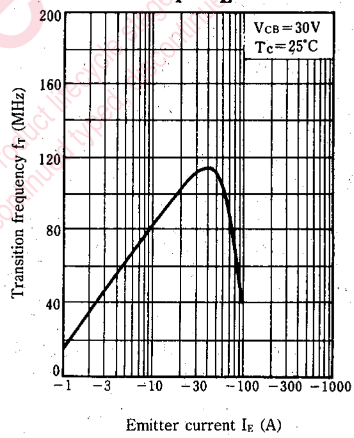
$V_{CE(sat)} - I_C$



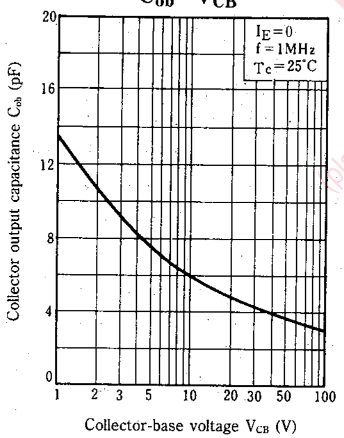
$h_{FE} - I_C$



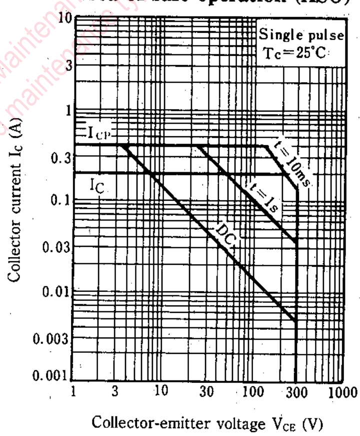
$f_T - I_E$



$C_{ob} - V_{CB}$



Area of safe operation (ASO)



Maintenance/Discontinued
Maintenance/Discontinued includes following four Product lifecycle stage. (planed maintenance type, maintenance type, planed discontinued typed, discontinued type)

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