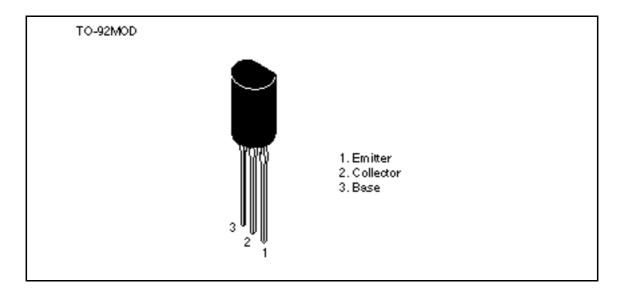
Silicon NPN Triple Diffused

HITACHI

Application

- High voltage amplifier
- TV Video output

Outline



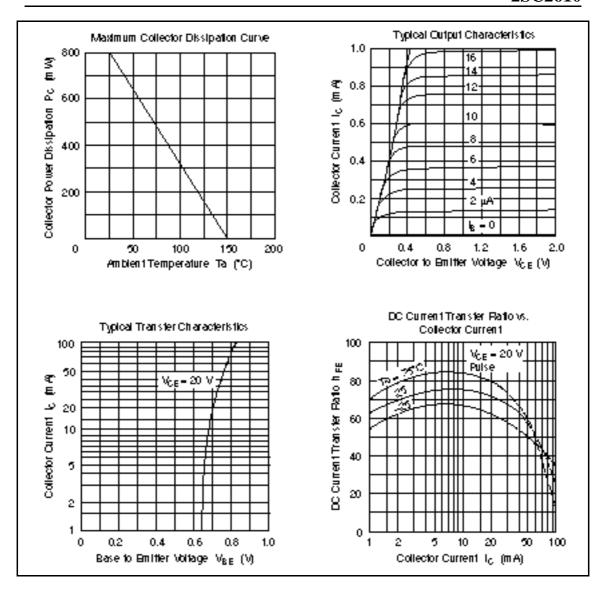


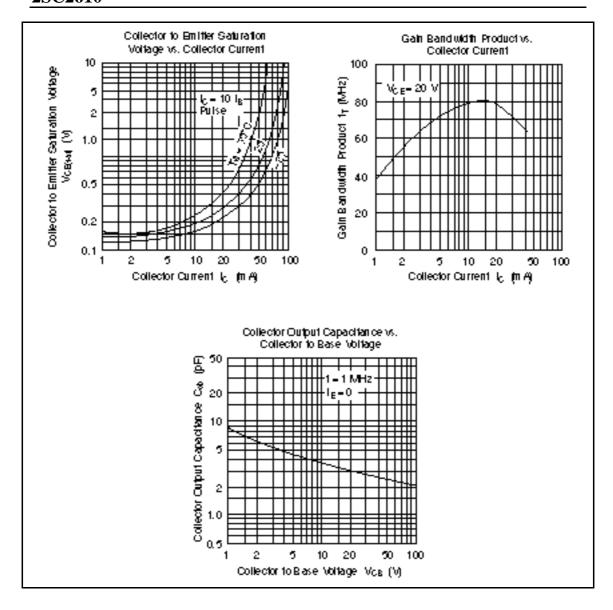
Absolute Maximum Ratings ($Ta = 25^{\circ}C$)

Item	Symbol	Ratings	Unit	
Collector to base voltage	V_{CBO}	300	V	
Collector to emitter voltage	V _{CEO}	300	V	
Emitter to base voltage	V_{EBO}	5	V	
Collector current	I _c	100	mA	
Collector power dissipation	P _c	800	mW	
Junction temperature	Tj	150	°C	
Storage temperature	Tstg	-55 to +150	°C	

Electrical Characteristics ($Ta = 25^{\circ}C$)

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	300	_	_	V	$I_{c} = 10 \ \mu A, \ I_{E} = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	300	_	_	V	I_{c} = 1 mA, R_{BE} =
Emitter to base breakdown voltage	$V_{(BR)EBO}$	5	_	_	V	$I_{E} = 10 \ \mu A, \ I_{C} = 0$
Collector cutoff current	I _{CEO}	_	_	1.0	μΑ	$V_{CE} = 250 \text{ V}, R_{BE} =$
DC current transfer ratio	h_{FE}	30	_	200		$V_{CE} = 20 \text{ V}, I_{C} = 20 \text{ mA}$
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	_	_	1.5	V	$I_{\rm C}$ = 20 mA, $I_{\rm B}$ = 2 mA
Gain bandwidth product	f _T	50	80	_	MHz	$V_{CE} = 20 \text{ V}, I_{C} = 20 \text{ mA}$
Collector output capacitance	Cob	_	_	4.0	pF	$V_{CB} = 20 \text{ V}, I_{E} = 0, f = 1 \text{ MHz}$





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