

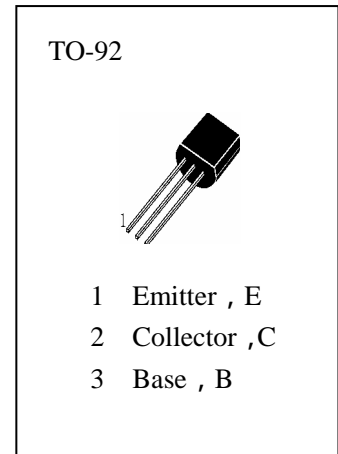


APPLICATIONS

Class-B video output stages in colour television and professional monitor equipment

ABSOLUTE MAXIMUM RATINGS ( Ta=25 )

- T<sub>stg</sub>—Storage Temperature..... -55~150
- T<sub>j</sub>—Junction Temperature..... 150
- P<sub>C</sub>—Collector Dissipation.....830mW
- V<sub>CB0</sub>—Collector-Base Voltage.....-300V
- V<sub>CEO</sub>—Collector-Emitter Voltage.....-300V
- V<sub>EBO</sub>—Emitter-Base Voltage.....-5V
- I<sub>C</sub>—Collector Current.....-50mA



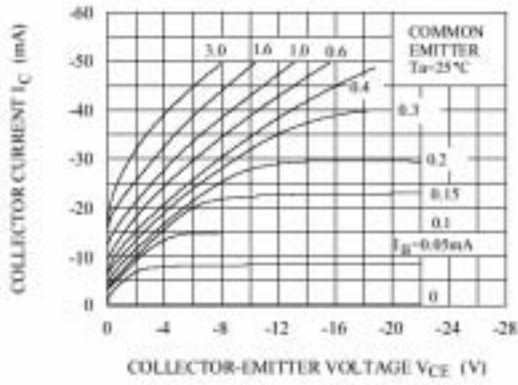
ELECTRICAL CHARACTERISTICS ( Ta=25 )

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BVCBO	Collector-Base Breakdown Voltage	-300			V	I <sub>C</sub> =-100 μ A, I <sub>E</sub> =0
BVCER	Collector-Emitter Breakdown Voltage	-300			V	I <sub>C</sub> =-1mA, R <sub>BE</sub> =2.7K
BVEBO	Emitter-Base Breakdown Voltage	-5			V	I <sub>E</sub> =-10 μ A , I <sub>C</sub> =0
ICER	Collector Cut-off Current			-10	μ A	V <sub>CE</sub> =-200V, R <sub>BE</sub> =2.7
IEBO	Emitter-Base Cut-off Current			-10	μ A	V <sub>EB</sub> =-5V, I <sub>C</sub> =0
HFE	DC Current Gain	50				V <sub>CE</sub> =-20V, I <sub>C</sub> =-25mA
VCE(sat)	Collector- Emitter Saturation Voltage			-0.6	V	I <sub>C</sub> =-30mA, I <sub>B</sub> =-5mA
f <sub>T</sub>	Current Gain-Bandwidth Product	60			MHZ	V <sub>CE</sub> =-10V, I <sub>C</sub> =-10mA
Cob	Output Capacitance			1.6	pF	V <sub>CB</sub> =-30V, I <sub>C</sub> =0,f=1MHZ

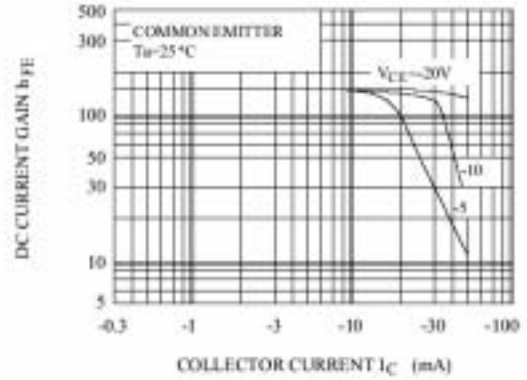


# H421

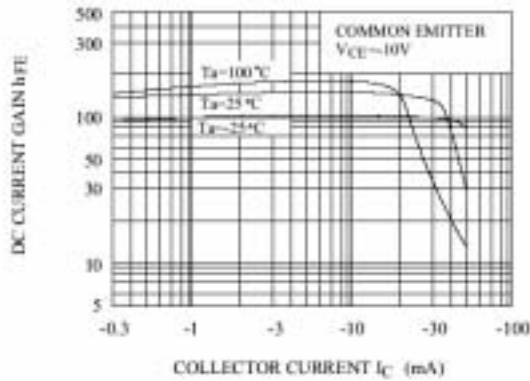
$I_C - V_{CE}$  (LOW VOLTAGE REGION)



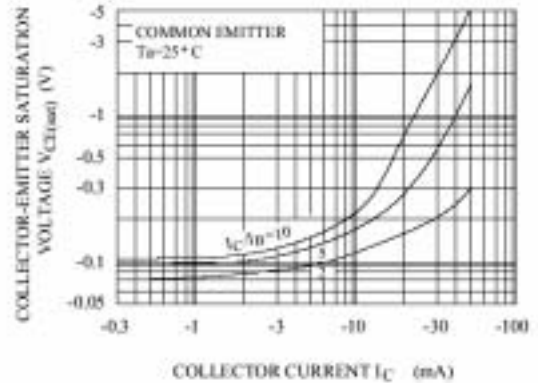
$h_{FE} - I_C$



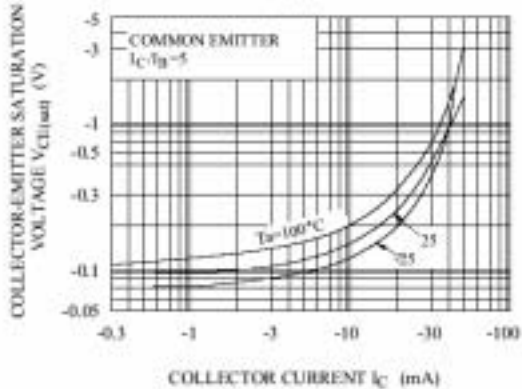
$h_{FE} - I_C$



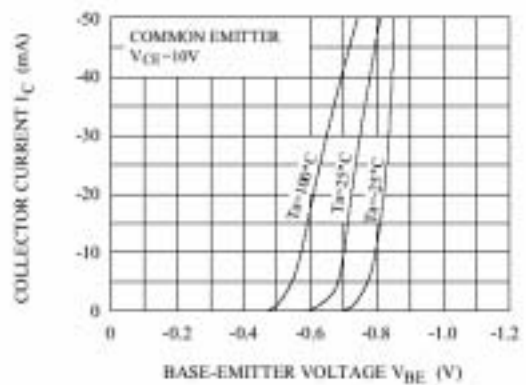
$V_{CE(sat)} - I_C$



$V_{CE(sat)} - I_C$



$I_C - V_{BE}$





# H421

