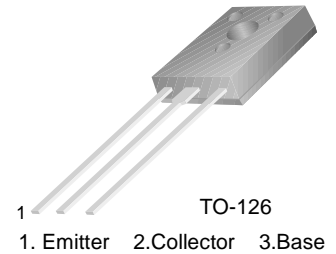


■■ APPLICATION: Color TV Chroma Output and Video Output

TO-126
■■ MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	300	V
Collector-emitter voltage	V_{CEO}	300	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_{C}	200	mA
Power Dissipation	P_{C}	1.25~10	W
Junction Temperature	T_{J}	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55~150	$^{\circ}\text{C}$


■■ ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Common Emitter DC Current Gain	h_{FE}	40	80	250		$V_{\text{CE}}=10\text{V}$, $I_{\text{C}}=10\text{mA}$
Collector Cut-off Current	I_{CBO}			0.1	μA	$V_{\text{CB}}=200\text{V}$, $I_{\text{E}}=0$
Emitter Cut-off Current	I_{EBO}			0.1	μA	$V_{\text{EB}}=5\text{V}$, $I_{\text{C}}=0$
Collector-Base Breakdown Voltage	BV_{CBO}	300			V	$I_{\text{C}}=0.1\text{mA}$, $I_{\text{E}}=0$
Collector-Emitter Breakdown Voltage	BV_{CEO}	300			V	$I_{\text{C}}=10\text{mA}$, $I_{\text{B}}=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	5			V	$I_{\text{E}}=0.1\text{mA}$, $I_{\text{C}}=0$
Collector-Emitter Saturation Voltage	$V_{\text{CE(sat)}}$			1.5	V	$I_{\text{C}}=50\text{mA}$, $I_{\text{B}}=5\text{mA}$
Gain bandwidth product	f_{T}	50	80		MHz	$I_{\text{C}}=10\text{mA}$, $V_{\text{CE}}=30\text{V}$
Feed Back Capacitance	C_{re}			3	pF	$V_{\text{CB}}=30\text{V}$, $I_{\text{E}}=0$, $f=1\text{MHz}$

■■ h_{FE} Classification And Marking

Classification	N	M	L	K
h_{FE}	40~80	60~120	100~200	160~250