

Silicon NPN Power Transistors

KTC3229

**DESCRIPTION**

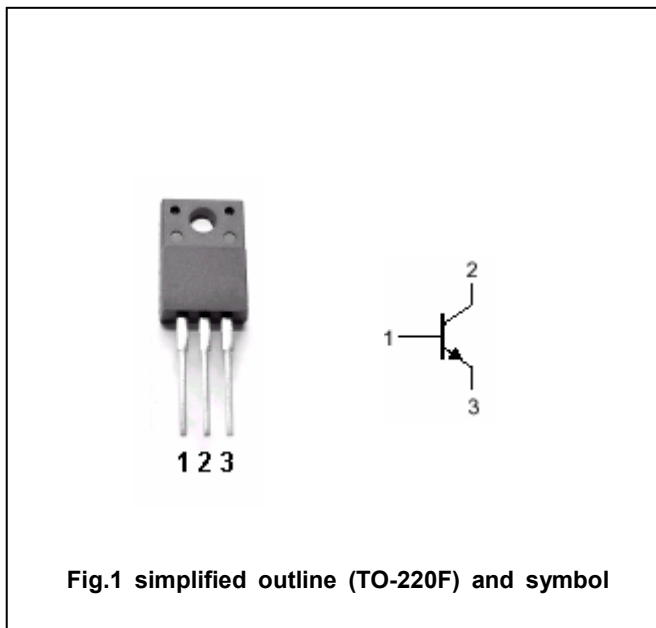
- With TO-220F package
- High voltage : $V_{CE0}=300V$

**APPLICATIONS**

- For color TV chroma output application

**PINNING**

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



**Absolute maximum ratings( $T_a=25^\circ C$ )**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	300	V
$V_{CEO}$	Collector-emitter voltage	Open base	300	V
$V_{EBO}$	Emitter-base voltage	Open collector	5	V
$I_C$	Collector current		0.1	A
$I_B$	Base current		20	mA
$P_C$	Collector dissipation	$T_a=25^\circ C$	2	W
$T_j$	Junction temperature		150	$^\circ C$
$T_{stg}$	Storage temperature		-55~150	$^\circ C$

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## CHARACTERISTICS

T<sub>j</sub>=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =10mA; I <sub>B</sub> =1mA			1.0	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =240V; I <sub>E</sub> =0			1.0	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			1.0	μA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =0.5mA ; V <sub>CE</sub> =10V	20			
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =20mA ; V <sub>CE</sub> =10V	30		200	
f <sub>T</sub>	Transition frequency	I <sub>C</sub> =20mA ; V <sub>CE</sub> =20V	75			MHz
C <sub>OB</sub>	Collector output capacitance	f=1MHz; V <sub>CB</sub> =20V			4.0	pF



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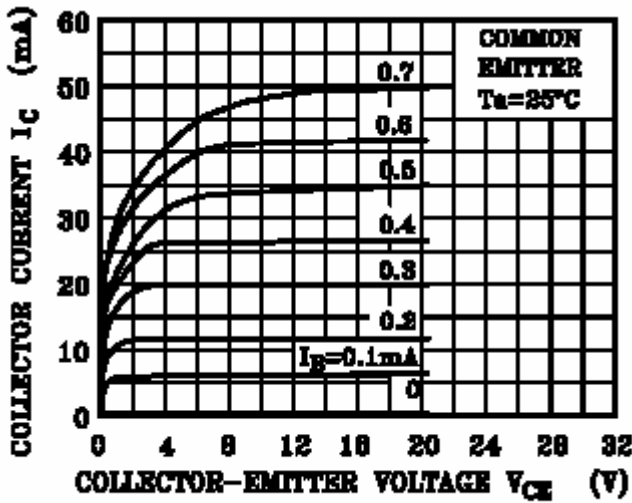


Fig.3 Static Characteristic

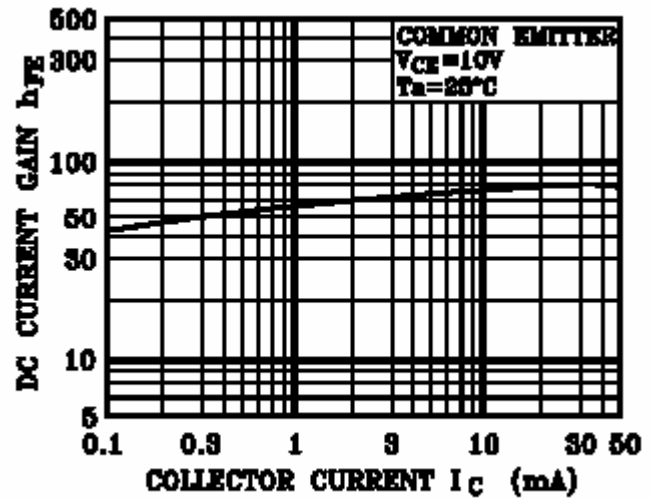


Fig.4 DC current Gain

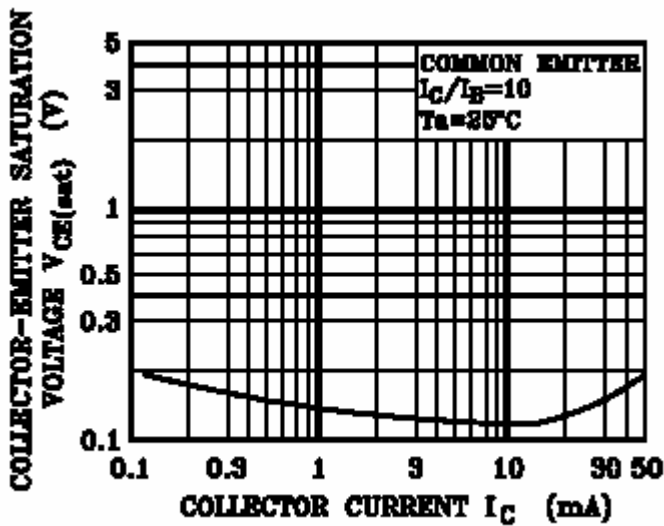


Fig.5 Collector-Emitter Saturation Voltage

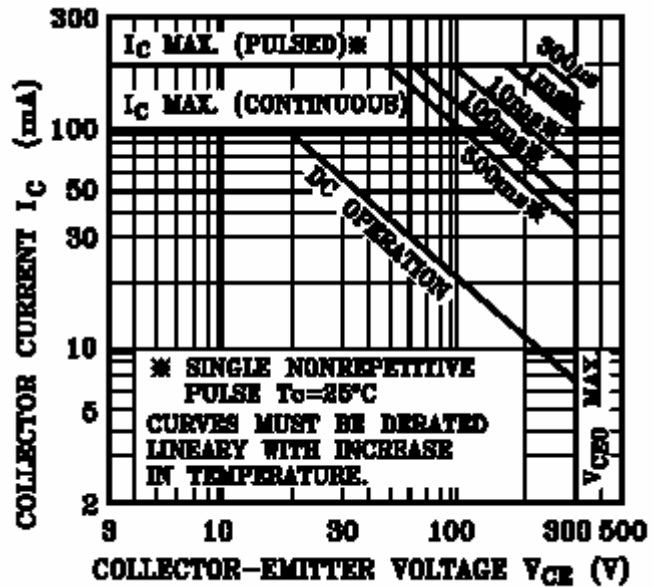


Fig.6 Safe Operating Area