

# KSD1362

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## B/W TV Horizontal Deflection Output

- Collector- Base Voltage :  $V_{CBO} = 150V$
- Collector Current :  $I_C = 5A$
- Collector Dissipation :  $P_C = 20W$  ( $T_C=25^\circ C$ )



TO-220F  
1.Base 2.Collector 3.Emitter

## NPN Epitaxial Silicon Transistor

### Absolute Maximum Ratings $T_C=25^\circ C$ unless otherwise noted

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	150	V
$V_{CEO}$	Collector-Emitter Voltage	70	V
$V_{EBO}$	Emitter-Base Voltage	8	V
$I_C$	Collector Current	5	A
$P_C$	Collector Dissipation ( $T_C=25^\circ C$ )	20	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{STG}$	Storage Temperature	- 55 ~ 150	$^\circ C$

### Electrical Characteristics $T_C=25^\circ C$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$BV_{CBO}$	Collector-Base Breakdown Voltage	$I_C = 1mA, I_E = 0$	150			V
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	$I_C = 20mA, R_{BE} = \infty$	70			V
$BV_{EBO}$	Emitter-Base Breakdown Voltage	$I_E = 1mA, I_C = 0$	8			V
$I_{CBO}$	Collector Cut-off Current	$V_{CB} = 100V, I_E = 0$			20	$\mu A$
$h_{FE}$	DC Current Gain	$V_{CE} = 5V, I_C = 5A$	20		140	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 5A, I_B = 0.5A$			1	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = 5A, I_B = 0.5A$			1.5	V
$f_T$	Current Gain Bandwidth Product	$V_{CE} = 5V, I_C = 0.5A$		10		MHz

## $h_{FE}$ Classification

Classification	N	R	O
$h_{FE}$	20 ~ 50	40 ~ 80	70 ~ 140

# Typical Characteristics

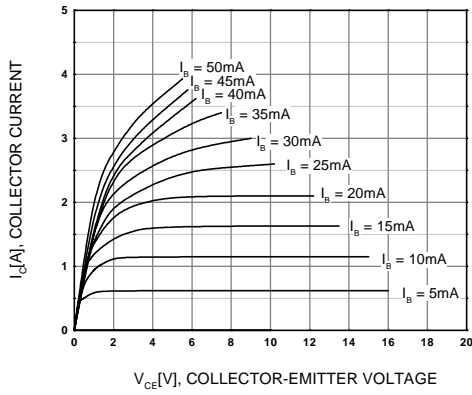


Figure 1. Static Characteristic

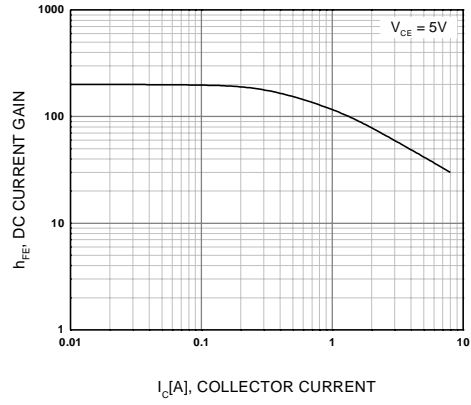


Figure 2. DC current Gain

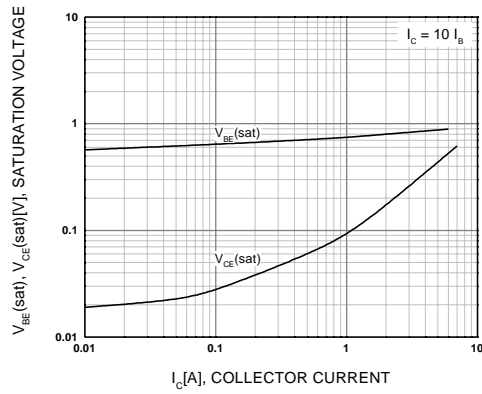


Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

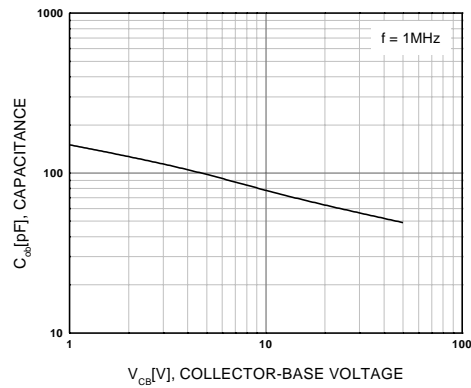


Figure 4. Collector Output Capacitance

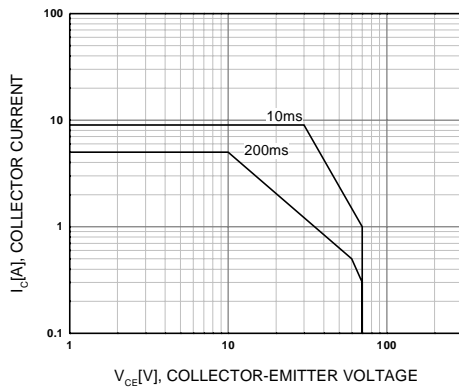


Figure 5. Safe Operating Area

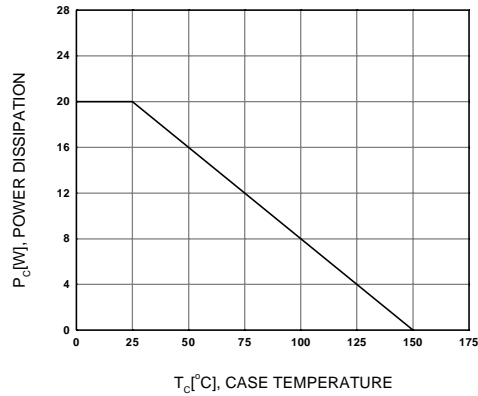


Figure 6. Power Derating



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