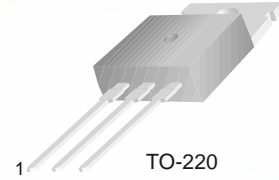


**FAIRCHILD**  
SEMICONDUCTOR™

## KSB546

### TV Vertical Deflection Output

- Collector-Base Voltage :  $V_{CBO} = -200V$
- Collector Current :  $I_C = -2A$
- Collector Dissipation :  $P_C = 25W$  ( $T_C=25^\circ C$ )
- Complement to KSD401



1.Base 2.Collector 3.Emitter

### PNP Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	- 200	V
$V_{CEO}$	Collector-Emitter Voltage	- 150	V
$V_{EBO}$	Emitter-Base Voltage	- 5	V
$I_C$	Collector Current(DC)Y	- 2	A
$P_C$	Collector Dissipation ( $T_C=25^\circ C$ )	25	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	$I_C = - 500\mu A, I_E = 0$	- 200			V
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	$I_C = - 10mA, I_B = 0$	- 150			V
$BV_{EBO}$	Emitter-Base Breakdown Voltage	$I_E = - 500\mu A, I_C = 0$	- 5			V
$I_{CBO}$	Collector Cut-off Current	$V_{CB} = - 150V, I_E = 0$			- 50	$\mu A$
$h_{FE}$	DC Current Gain	$V_{CE} = - 10V, I_E = - 0.4A$	40		240	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = - 500mA, I_B = - 50mA$			- 1	V
$f_T$	Current Gain Bandwidth Product	$V_{CE} = - 10V, I_C = - 0.4A$		5		MHz

### $h_{FE}$ Classification

Classification	R	O	Y
$h_{FE}$	40 ~ 80	70 ~ 140	120 ~ 240



# Typical Characteristics

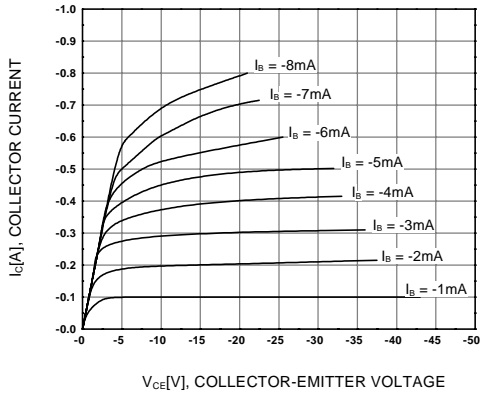


Figure 1. Static Characteristic

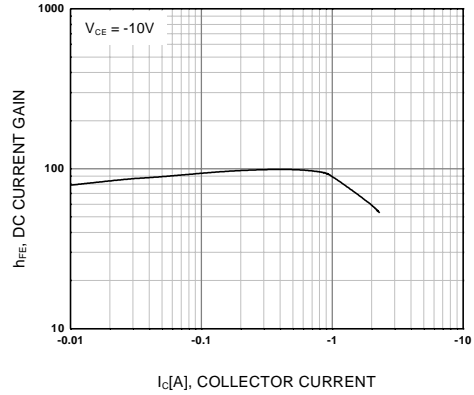


Figure 2. DC current Gain

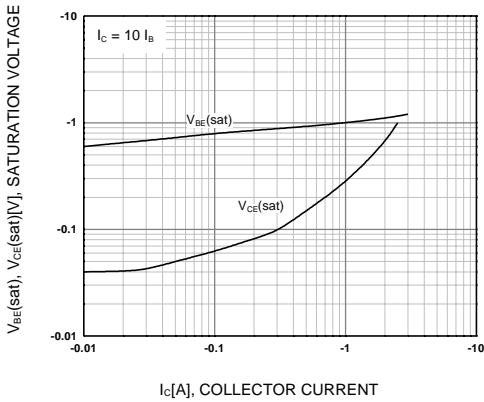


Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

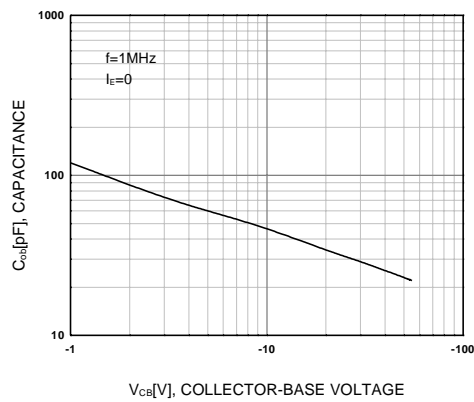


Figure 4. Collector Output Capacitance

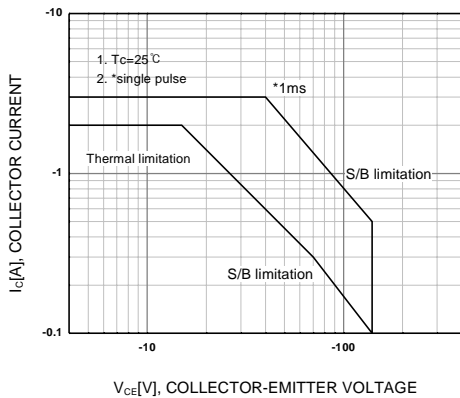


Figure 5. Safe Operating Area

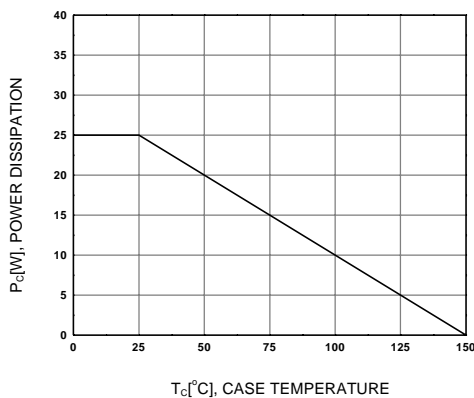
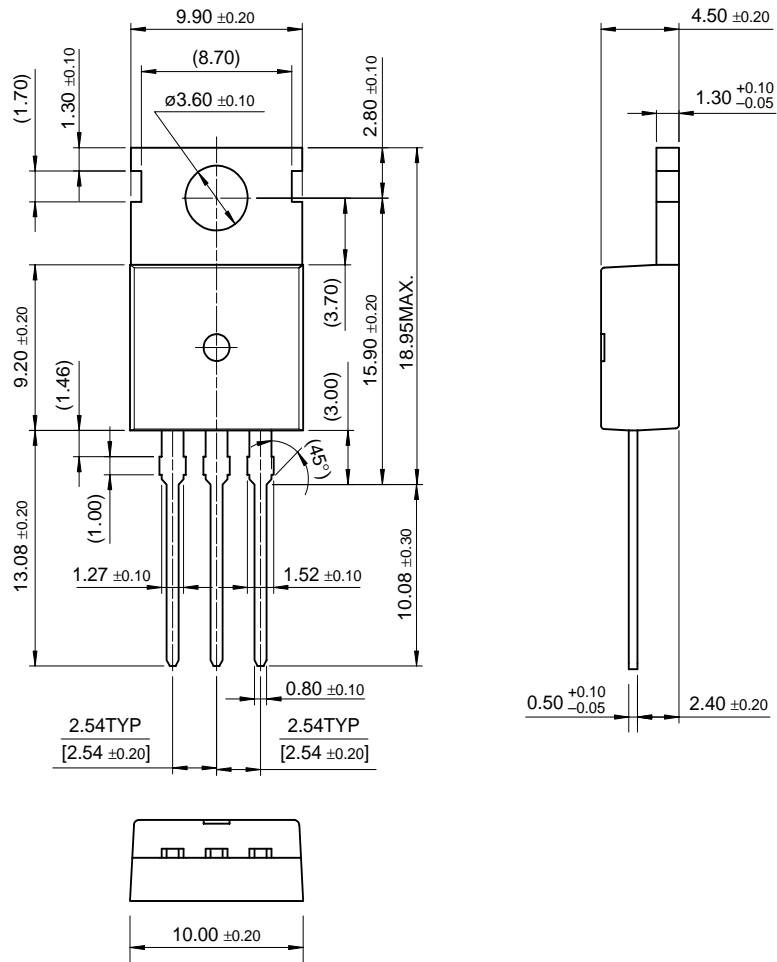


Figure 6. Power Derating

# Package Dimensions

## TO-220



Dimensions in Millimeters

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Bottomless™	ISOPLANAR™	SyncFET™
CoolFET™	MICROWIRE™	TinyLogic™
CROSSVOLT™	POP™	UHC™
E <sup>2</sup> CMOS™	PowerTrench®	VCX™
FACT™	QFET™	
FACT Quiet Series™	QST™	
FAST®	Quiet Series™	
FAST <sub>r</sub> ™	SuperSOT™-3	
GTO™	SuperSOT™-6	

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