

## KSD362

### B/W TV Horizontal Deflection Output

- Collector-Base Voltage :  $V_{CBO}=150V$
- Collector Current :  $I_C=5A$
- Collector Dissipation :  $P_C=40W(T_C=25^\circ C)$



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 ( $T_C=25^\circ C$ )	40	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	$I_C = 2mA, R_{BE} = \infty$	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

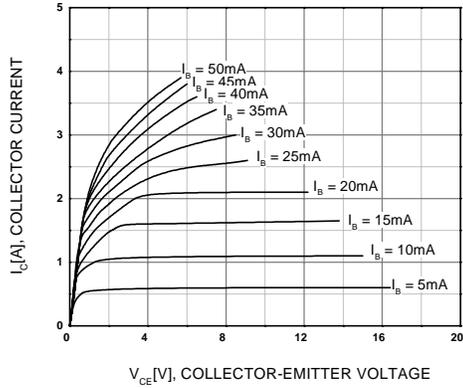


Figure 1. Static Characteristic

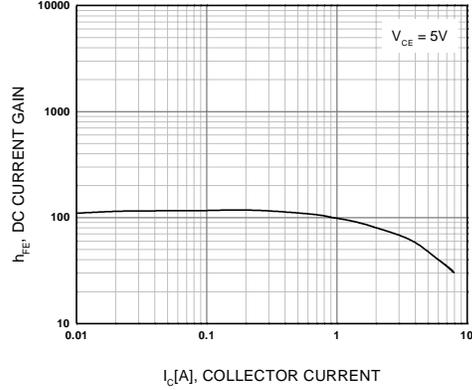


Figure 2. DC current Gain

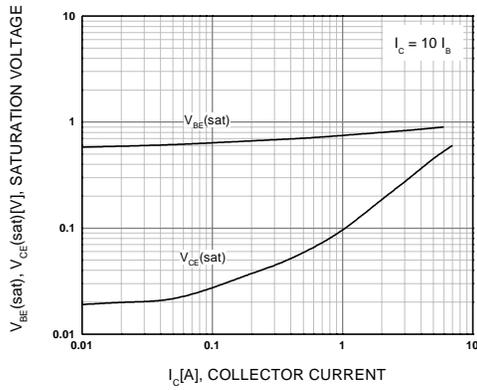


Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

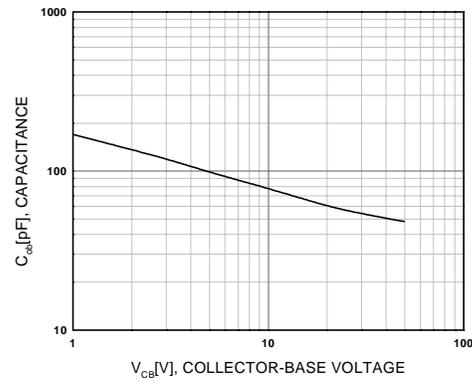


Figure 4. Collector Output Capacitance

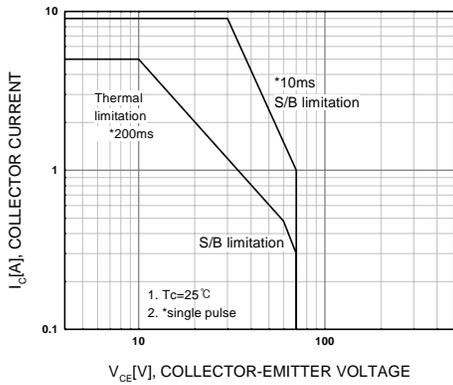


Figure 5. Safe Operating Area

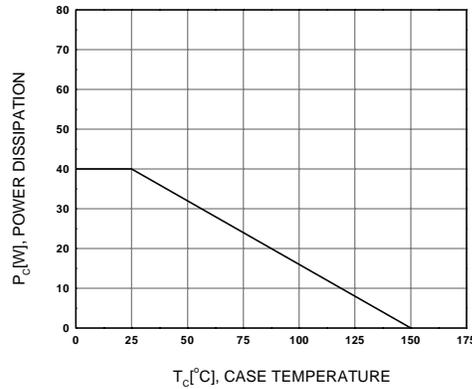
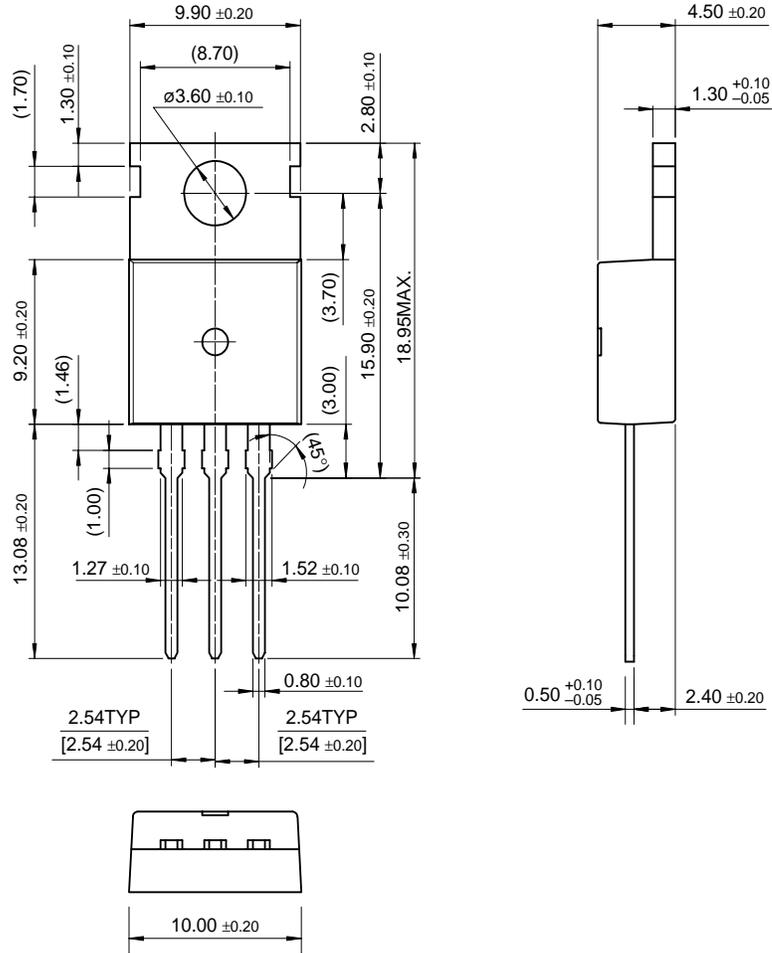


Figure 6. Power Derating

# Package Dimensions

## TO-220



Dimensions in Millimeters

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Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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KSD362

NPN Epitaxial Silicon Transistor

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Features

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Applications

**B/W TV Horizontal Deflection Output**

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Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
KSD362RTU	Full Production	\$0.353	TO-220	3	RAIL
KSD362N	Full Production	\$0.353	TO-220	3	BULK
KSD362R	Full Production	\$0.353	TO-220	3	BULK

\* 1,000 piece Budgetary Pricing

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