

KSH2955

KSH2955

General Purpose Amplifier Low Speed Switching Applications D-PAK for Surface Mount Applications

- Lead Formed for Surface Mount Applications (No Suffix)
- Straight Lead (I-PAK, "-I" Suffix)
- Electrically Similar to Popular KSE2955T
- DC Current Gain Specified to 10A
- High Current Gain - Bandwidth Product:
 $f_T = 2\text{MHz (MIN)}, I_C = -500\text{mA}$



PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	- 70	V
V_{CEO}	Collector-Emitter Voltage	- 60	V
V_{EBO}	Emitter-Base Voltage	- 5	V
I_C	Collector Current	- 10	A
I_B	Base Current	- 6	A
P_C	Collector Dissipation ($T_C=25^\circ\text{C}$)	20	W
	Collector Dissipation ($T_a=25^\circ\text{C}$)	1.75	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	- 55 ~ 150	$^\circ\text{C}$

Electrical Characteristics $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
$V_{CEO(sus)}$	* Collector-Emitter Sustaining Voltage	$I_C = - 30\text{mA}, I_B = 0$	-60		V
I_{CEO}	Collector Cut-off Current	$V_{CE} = - 30\text{V}, I_E = 0$		- 50	μA
I_{CBO}	Collector Cut-off Current	$V_{CB} = - 70\text{V}, I_E = 0$		- 2	mA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = - 5\text{V}, I_C = 0$		- 0.5	mA
h_{FE}	* DC Current Gain	$V_{CE} = - 4\text{V}, I_C = - 4\text{A}$ $V_{CE} = - 4\text{V}, I_C = - 10\text{A}$	20 5	100	
$V_{CE(sat)}$	* Collector-Emitter Saturation Voltage	$I_C = - 4\text{A}, I_B = - 0.4\text{A}$		- 1.1	V
		$I_C = - 10\text{A}, I_B = - 3.3\text{A}$		- 8	V
$V_{BE(on)}$	* Base-Emitter ON Voltage	$V_{CE} = - 4\text{V}, I_C = - 4\text{A}$		-1.8	V
f_T	Current Gain Bandwidth Product	$V_{CE} = - 10\text{V}, I_C = - 500\text{mA}$	2		MHz

* Pulse Test: $PW \leq 300\text{ms}$, Duty Cycle $\leq 2\%$

Typical Characteristics

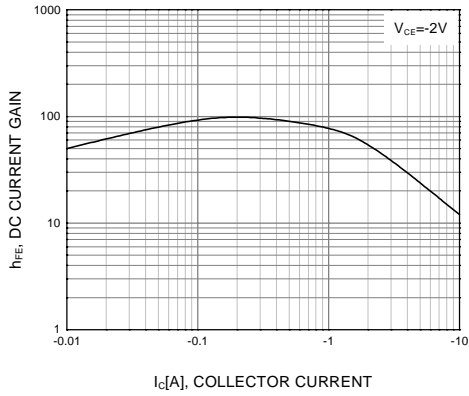


Figure 1. DC current Gain

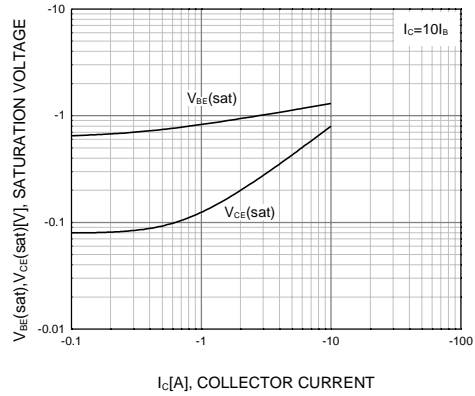


Figure 2. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

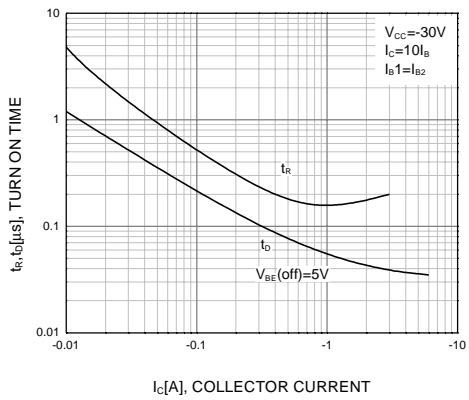


Figure 3. Turn On Time

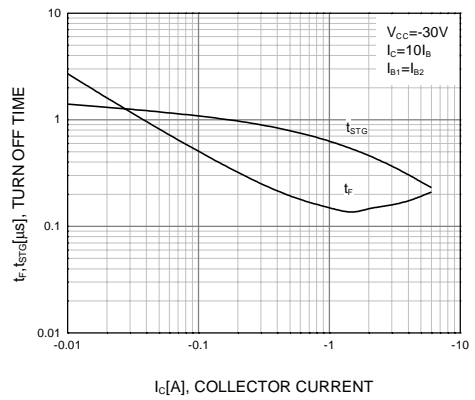


Figure 4. Turn Off Time

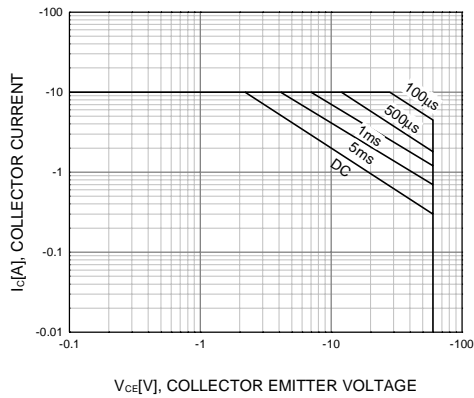


Figure 5. Safe Operating Area

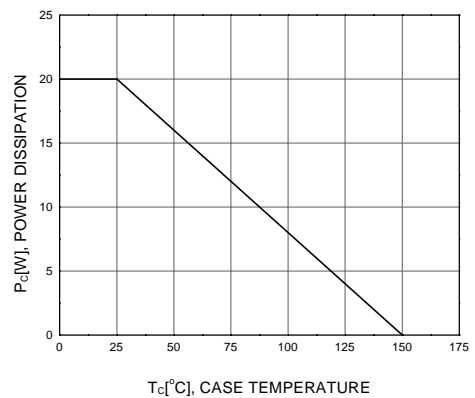
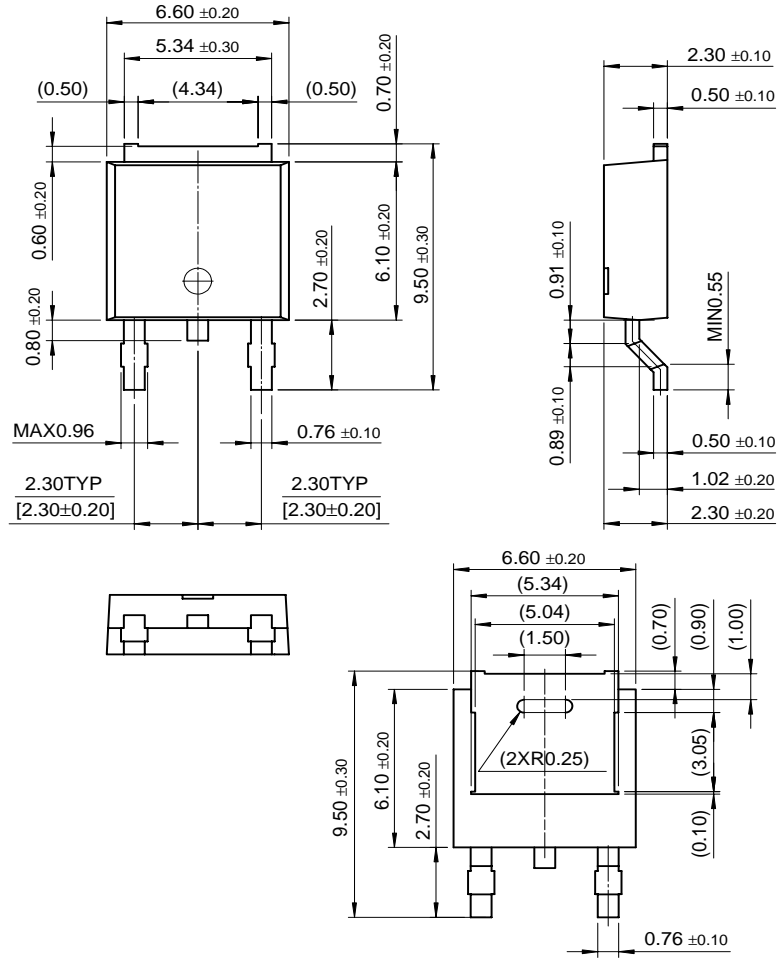


Figure 6. Power Derating

Package Dimensions

D-PAK



Dimensions in Millimeters

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Definition of Terms

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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KSH2955
PNP Epitaxial Silicon Transistor

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Applications

**General Purpose Amplifier Low Speed
Switching
D-PAK for Surface Mount**

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Product status/pricing/packageing

Product	Product status	Pricing*	Package type	Leads	Packing method
KSH2955TM	Full Production	\$0.35	TO-252(DPAK)	2	TAPE REEL
KSH2955TF	Full Production	\$0.35	TO-252(DPAK)	2	TAPE REEL

* 1,000 piece Budgetary Pricing

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KSH2955I

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Applications

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Product status/pricing/packageing

Product	Product status	Pricing*	Package type	Leads	Packing method
KSH2955ITU	Full Production	\$0.35	TO-251(IPAK)	3	RAIL

* 1,000 piece Budgetary Pricing

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