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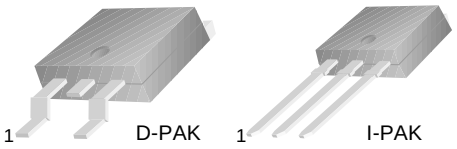
Please note: As part of the Fairchild Semiconductor integration, some of the Fairchild orderable part numbers will need to change in order to meet ON Semiconductor's system requirements. Since the ON Semiconductor product management systems do not have the ability to manage part nomenclature that utilizes an underscore (_), the underscore (_) in the Fairchild part numbers will be changed to a dash (-). This document may contain device numbers with an underscore (_). Please check the ON Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.onsemi.com. Please email any questions regarding the system integration to Fairchild_questions@onsemi.com.

FAIRCHILD
SEMICONDUCTOR®

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 = 2MHz (MIN), I_C = -500mA



1.Base 2.Collector 3.Emitter

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°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°C)	20	W
	Collector Dissipation (T_a=25°C)	1.75	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 55 ~ 150	°C

Electrical Characteristics T_C=25°C unless otherwise noted

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

* Pulse Test: PW≤300ms, Duty Cycle≤2%

Typical Characteristics

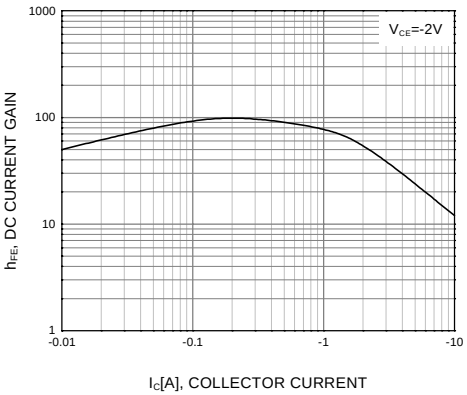


Figure 1. DC current Gain

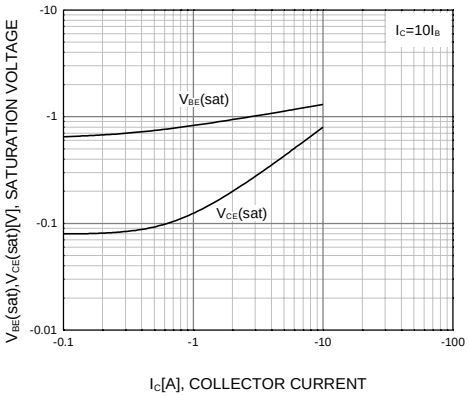


Figure 2. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

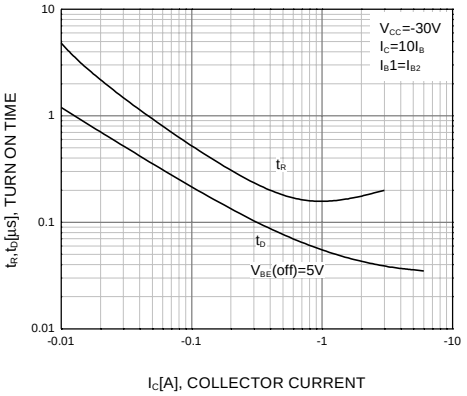


Figure 3. Turn On Time

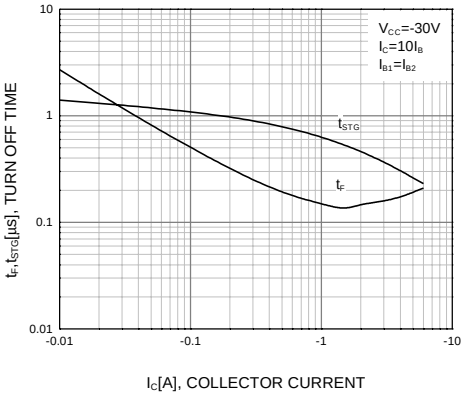


Figure 4. Turn Off Time

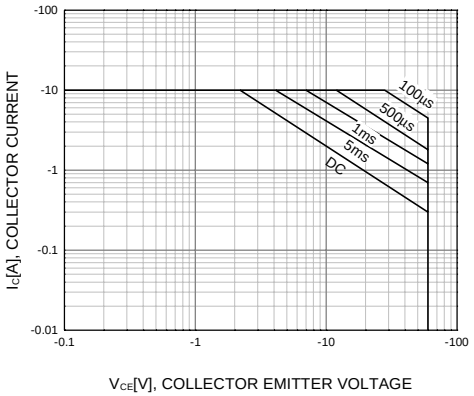


Figure 5. Safe Operating Area

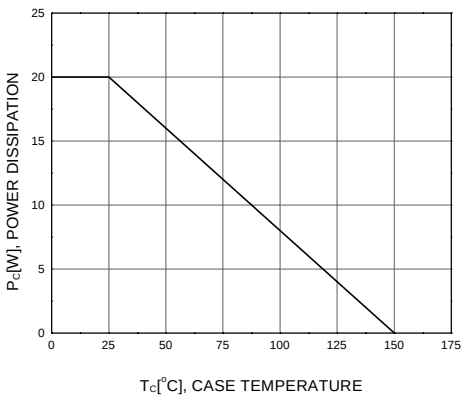
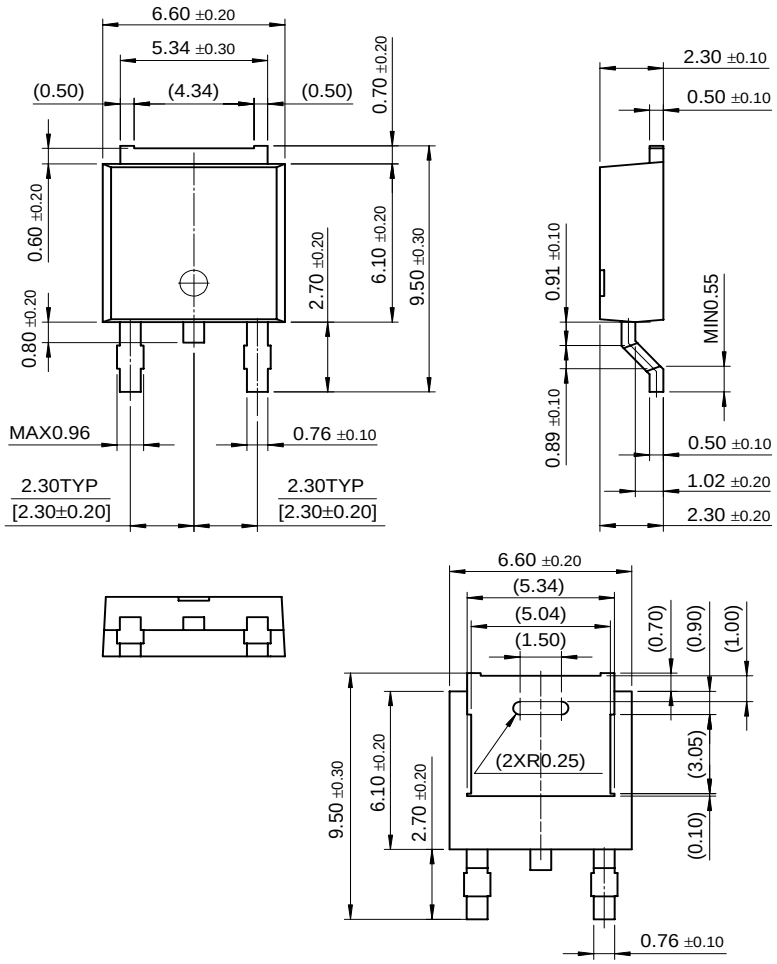


Figure 6. Power Derating

Package Dimensions

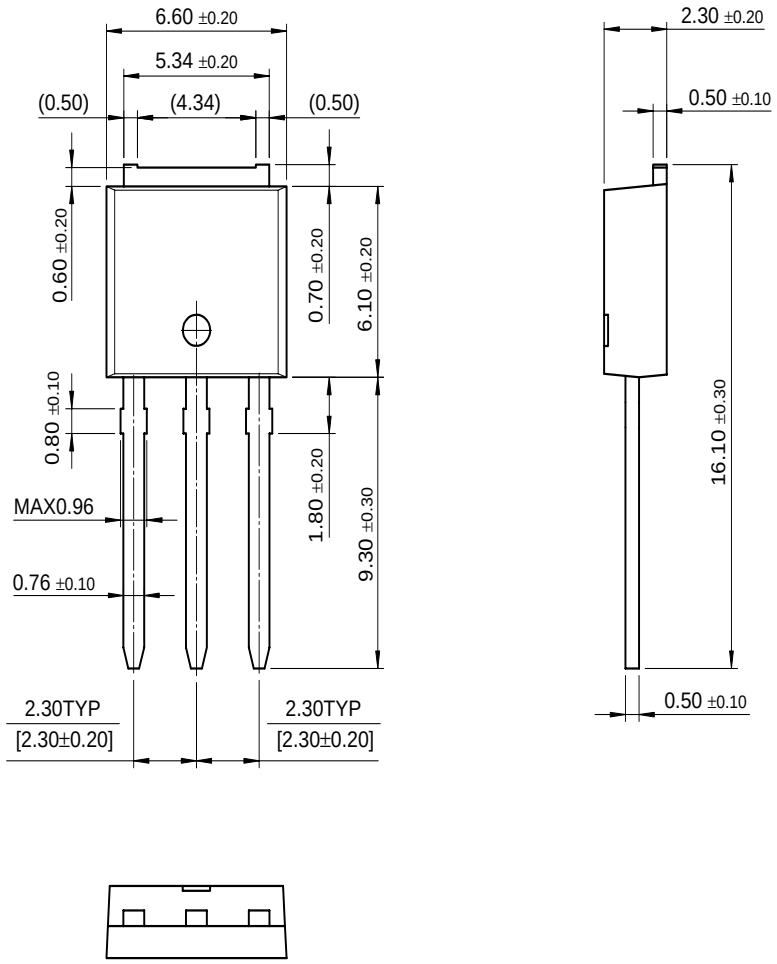
D-PAK



Dimensions in Millimeters

Package Dimensions (Continued)

I-PAK



Dimensions in Millimeters

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CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
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Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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