KSC2330OTA Datasheet

DiGi Electronics Part Number	KSC2330OTA-DG
Manufacturer	onsemi
Manufacturer Product Number	KSC2330OTA
Description	TRANS NPN 300V 0.1A TO92-3
Detailed Description	Bipolar (BJT) Transistor NPN 300 V 100 mA 50MHz 1 W Through Hole TO-92-3

https://www.DiGi-Electronics.com

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
KSC2330OTA	onsemi
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
NPN	100 mA
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
300 V	500mV @ 1mA, 10mA
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
100nA (ICBO)	70 @ 20mA, 10V
Power - Max:	Frequency - Transition:
1 W	50MHz
Operating Temperature:	Mounting Type:
150°C (TJ)	Through Hole
Package / Case:	Supplier Device Package:
TO-226-3, TO-92-3 Long Body (Formed Leads)	TO-92-3
Base Product Number:	
KSC2330	

Environmental & Export classification

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	
8541.29.0075	

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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
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KSC2330

Color TV Chroma Output

- Collector-Base Voltage : V_{CBO}=300V
- Current Gain Bandwidth Product : f_T=50MHz (TYP.)

TO-92L

1. Emitter 2. Collector 3. Base

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current	100	mA
P_C	Collector Power Dissipation	1	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 ~ +150	°C

Electrical Characteristics T_a=25°C unless otherwise notd

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	I_C=100μA, I_E=0	300			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C=5mA, I_B=0	300			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E=100μA, I_C=0	7			V
I_{CBO}	Collector Cut-off Current	V_{CB}=200V, I_E=0			0.1	μA
h_{FE}	DC Current Gain	V_{CE}=10V, I_C=20mA	40		240	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C=10mA, I_B=1mA			0.5	V
f_T	Current Gain Bandwidth Product	V_{CE}=30V, I_C=10mA		50		MHz
C_{ob}	Output Capacitance	V_{CB}=10V, I_E=0, f=1MHz		4		pF

h_{FE} Classification

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

Typical Characteristics

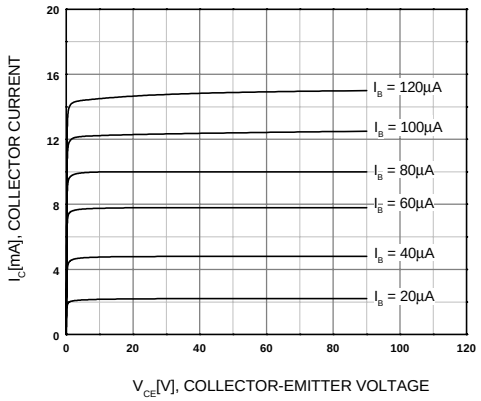


Figure 1. Static Characteristic

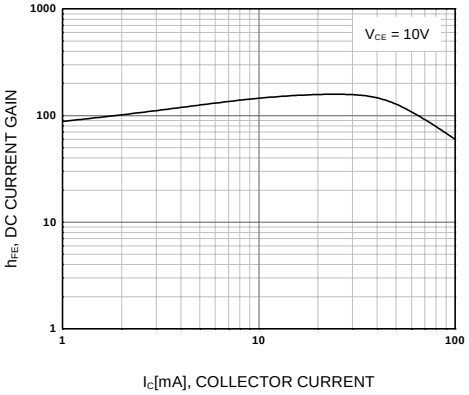


Figure 2. DC current Gain

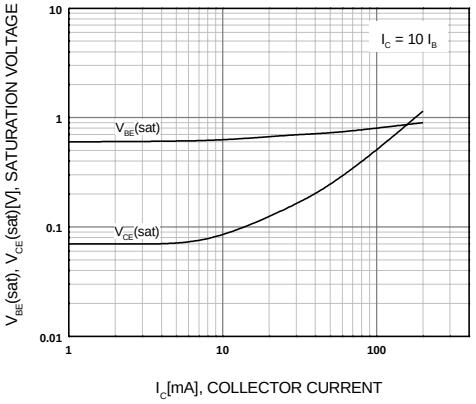


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

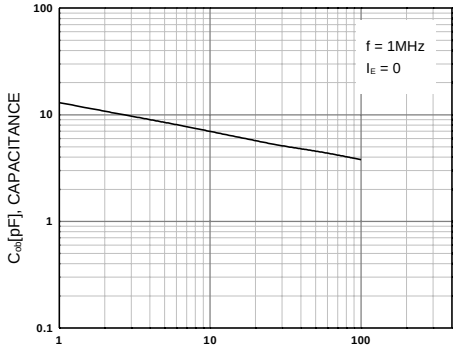


Figure 4. Collector Output Capacitance

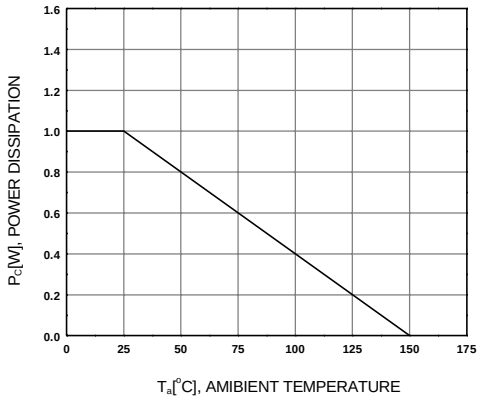
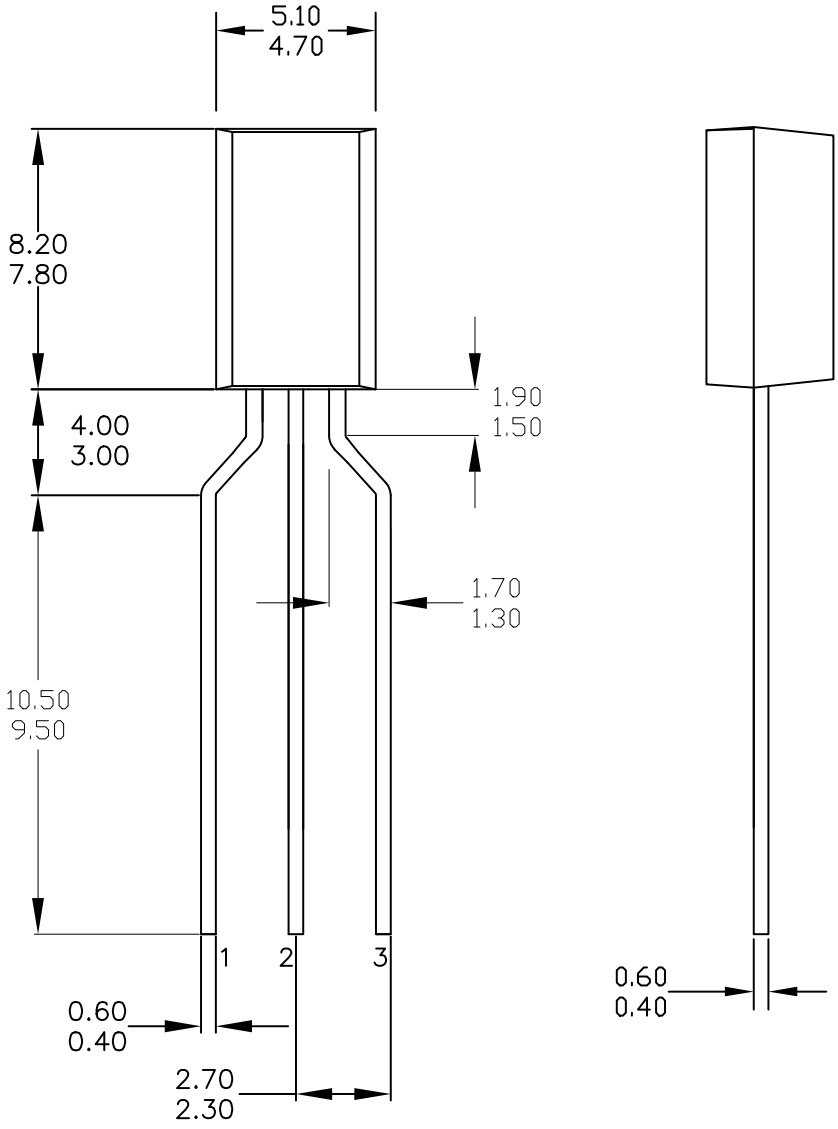
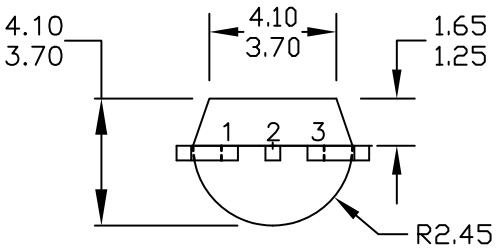


Figure 5. Power Derating

Package Dimensions

TO−92 3 8.0x4.9 (LEADFORMED)
CASE 135AM
ISSUE A





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Dimensions in Millimeters

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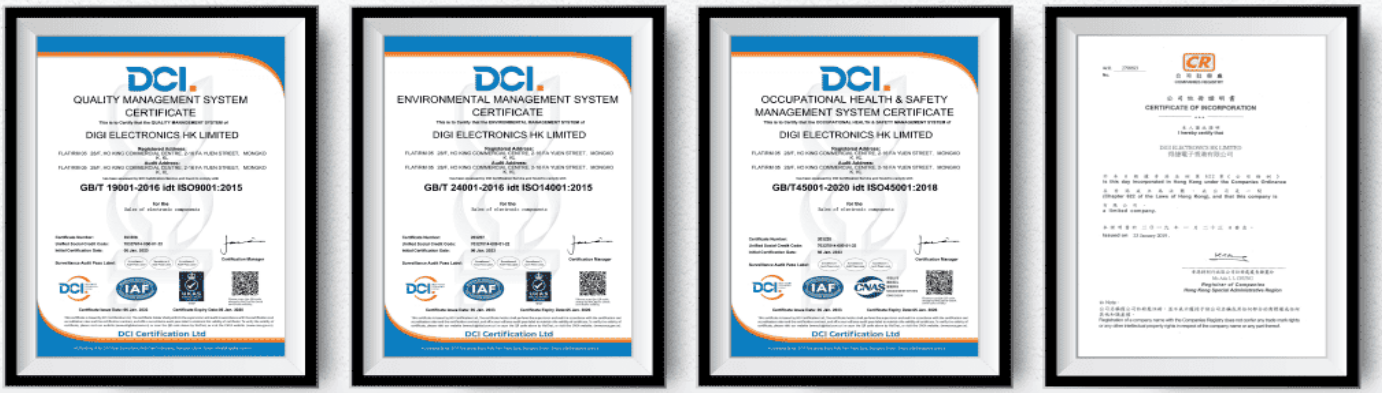

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