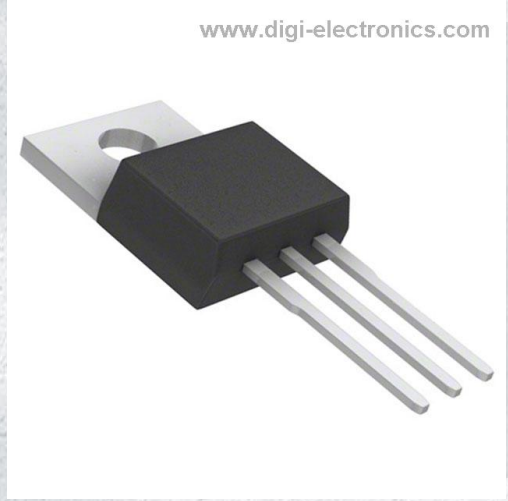
KSC1507YTU Datasheet



https://www.DiGi-Electronics.com

DiGi Electronics Part Number	KSC1507YTU-DG
Manufacturer	onsemi
Manufacturer Product Number	KSC1507YTU
Description	TRANS NPN 300V 200UA TO220-3
Detailed Description	Bipolar (BJT) Transistor NPN 300 V 200 µA 80MHz 15 W Through Hole TO-220-3

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
KSC1507YTU	onsemi
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
NPN	200 µA
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
300 V	2V @ 5mA, 50mA
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
100µA (ICBO)	120 @ 10mA, 10V
Power - Max:	Frequency - Transition:
15 W	80MHz
Operating Temperature:	Mounting Type:
150°C (TJ)	Through Hole
Package / Case:	Supplier Device Package:
TO-220-3	TO-220-3
Base Product Number:	
KSC1507	

Environmental & Export classification

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

FAIRCHILD
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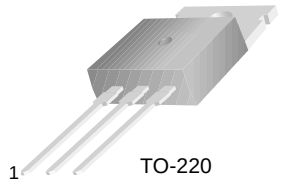
KSC1507

Color TV Chroma Output

- High Collector-Emitter Voltage : V_{CEO}=300V
- Current Gain Bandwidth Product : f_T=40MHz (Min.)



TO-220

1.Base 2.Collector 3.Emitter

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	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	0.2	mA
P_C	Collector Dissipation (T_C=25°C)	15	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.	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 = 10mA, I_B = 0	300			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = - 10μA, I_C = 0	7			V
I_{CBO}	Collector Cut-off Current	V_{CB} = 200V, I_E = 0			100	μA
h_{FE}	DC Current Gain	V_{CE} = 10V, I_C = 10mA	40		240	
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = 50mA, I_B = 5mA			2.0	V
f_T	Current Gain Bandwidth Product	V_{CE} = 30V, I_C = 10mA	40	80		MHz
C_{ob}	Output Capacitance	V_{CB} = 50V, I_E = 0, f = 1MHz		4		pF

h_{FE} Classification

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

Typical Characteristics

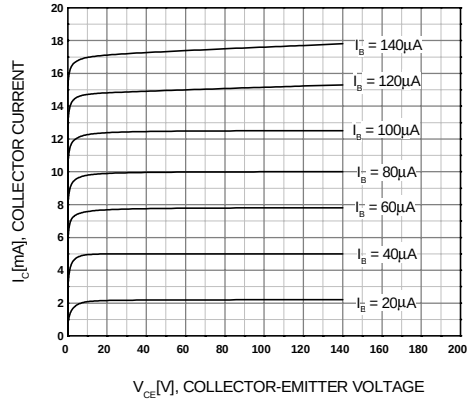


Figure 1. Static Characteristic

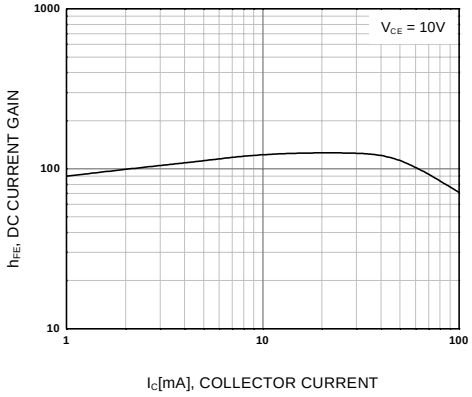


Figure 2. DC current Gain

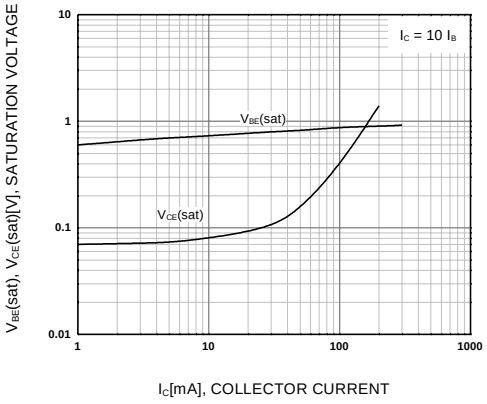


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

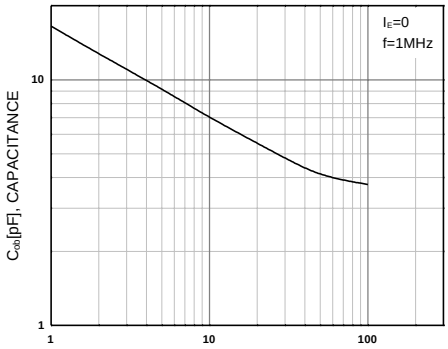


Figure 4. Collector Output Capacitance

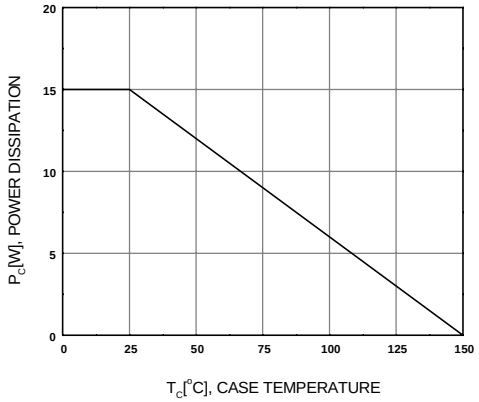
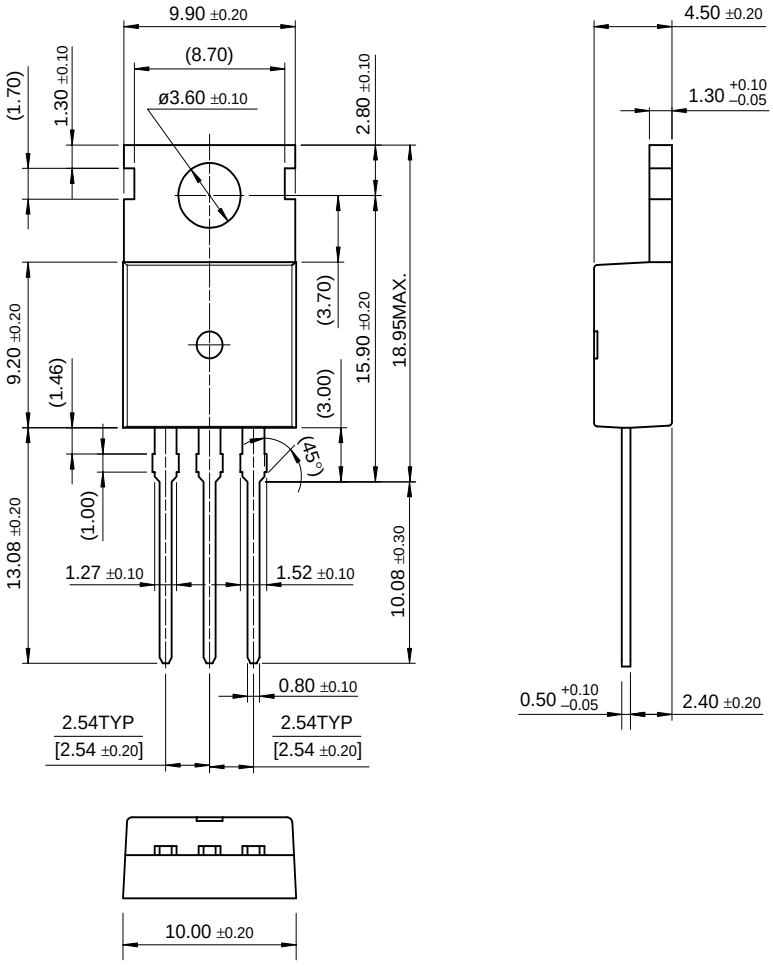


Figure 5. Power Derating

Package Dimensions

TO-220



Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic™
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EnSigna™	I^2C™	OCX™	RapidConfigure™	UHC™
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Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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Definition of Terms

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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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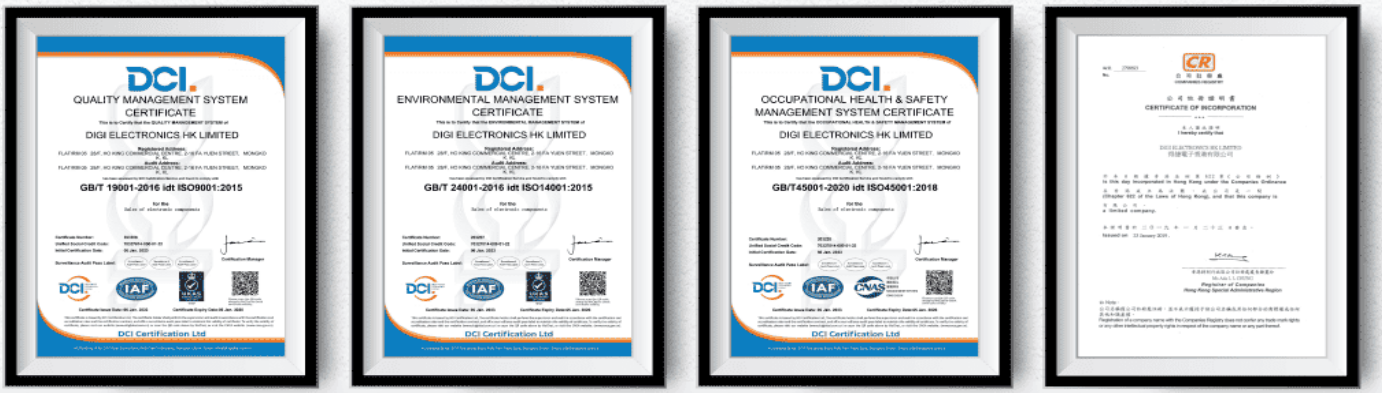

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