KSB772YSTSTU Datasheet

DiGi Electronics Part Number	KSB772YSTSTU-DG
Manufacturer	onsemi
Manufacturer Product Number	KSB772YSTSTU
Description	TRANS PNP 30V 3A TO126-3
Detailed Description	Bipolar (BJT) Transistor PNP 30 V 3 A 80MHz 1 W Through Hole TO-126-3

https://www.DiGi-Electronics.com

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
KSB772YSTSTU	onsemi
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
PNP	3 A
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
30 V	500mV @ 200mA, 2A
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
1µA (ICBO)	160 @ 1A, 2V
Power - Max:	Frequency - Transition:
1 W	80MHz
Operating Temperature:	Mounting Type:
150°C (TJ)	Through Hole
Package / Case:	Supplier Device Package:
TO-225AA, TO-126-3	TO-126-3
Base Product Number:	
KSB77	

Environmental & Export classification

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

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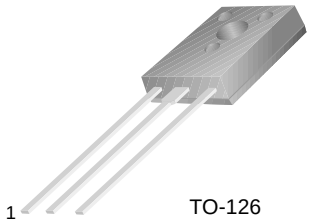
To learn more about ON Semiconductor, please visit our website at
www.onsemi.com

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.

KSB772

Audio Frequency Power Amplifier

- Low Speed Switching
- Complement to KSD882



TO-126

1. Emitter 2.Collector 3.Base

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	- 40	V
V_{CEO}	Collector-Emitter Voltage	- 30	V
V_{EBO}	Emitter-Base Voltage	- 5	V
I_C	Collector Current (DC)	- 3	A
I_{CP}	*Collector Current (Pulse)	- 7	A
I_B	Base Current (DC)	- 0.6	A
P_C	Collector Dissipation (T_C=25°C)	10	W
	Collector Dissipation (T_a=25°C)	1	W
$R_{\theta ja}$	Junction to Ambient	132	°C/W
$R_{\theta jc}$	Junction to Case	13.5	°C/W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 55 ~ 150	°C

* PW≤10ms, Duty Cycle≤50%

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
I_{CBO}	Collector Cut-off Current	V_{CB} = - 30V, I_E = 0			- 1	μA
I_{EBO}	Emitter Cut-off Current	V_{EB} = - 3V, I_C = 0			- 1	μA
h_{FE1}	* DC Current Gain	V_{CE} = - 2V, I_C = - 20mA	30	220		
h_{FE2}		V_{CE} = - 2V, I_C = - 1A	60	160	400	
V_{CE}(sat)	* Collector-Emitter Saturation Voltage	I_C = - 2A, I_B = - 0.2A		- 0.3	- 0.5	V
V_{BE}(sat)	* Base-Emitter Saturation Voltage	I_C = - 2A, I_B = - 0.2A		- 1.0	- 2.0	V
f_T	Current Gain Bandwidth Product	V_{CE} = - 5V, I_E = - 0.1A		80		MHz
C_{ob}	Output Capacitance	V_{CB} = - 10V, I_E = 0 f = 1MHz		55		pF

* Pulse Test: PW≤350μs, Duty Cycle≤2%

h_{FE} Classificntion

Classification	R	O	Y	G
h_{FE2}	60 ~ 120	100 ~ 200	160 ~ 320	200 ~ 400

Typical Characteristics

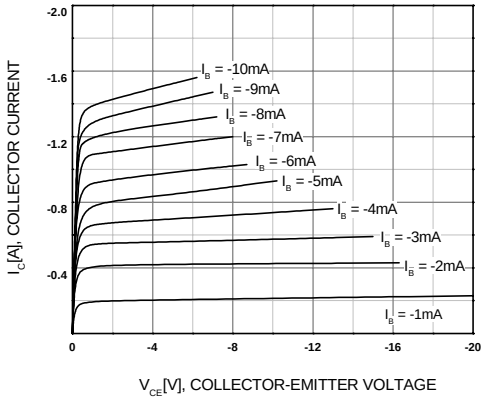


Figure 1. Static Characteristic

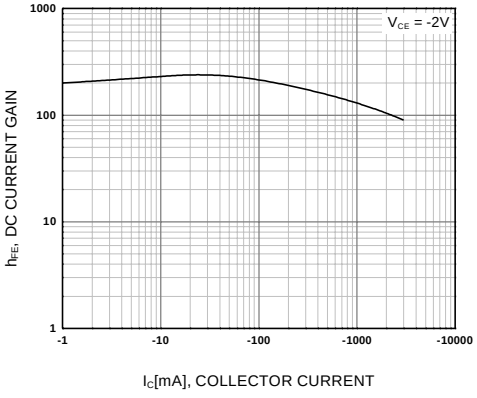


Figure 2. DC current Gain

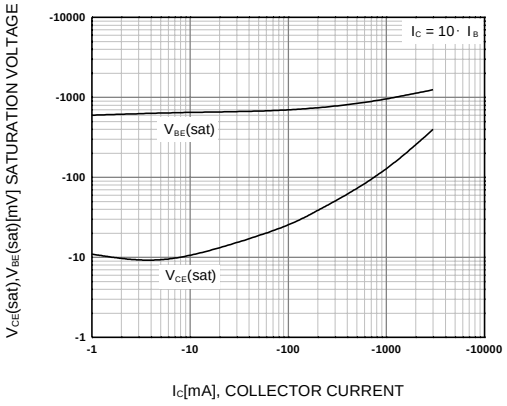


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

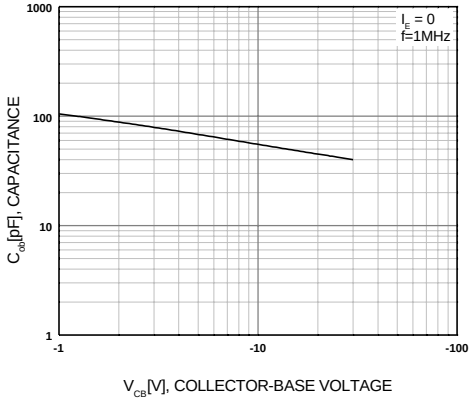


Figure 4. Collector Output Capacitance

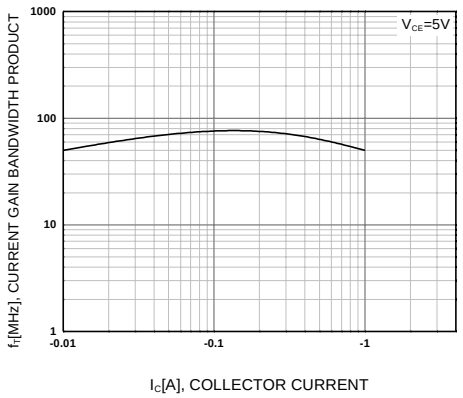


Figure 5. Current Gain Bandwidth Product

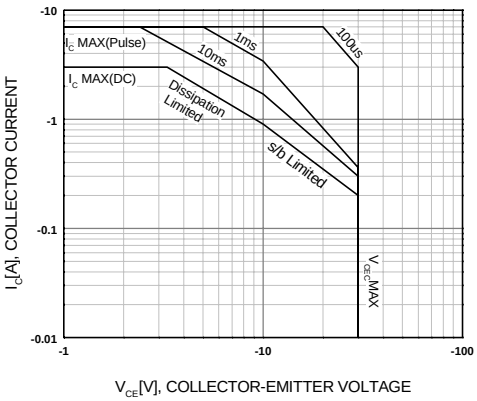


Figure 6. Safe Operating Area

Typical Characteristics (Continued)

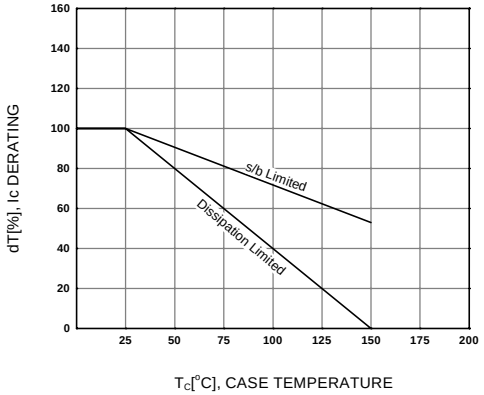


Figure 7. Derating Curve of Safe Operating Areas

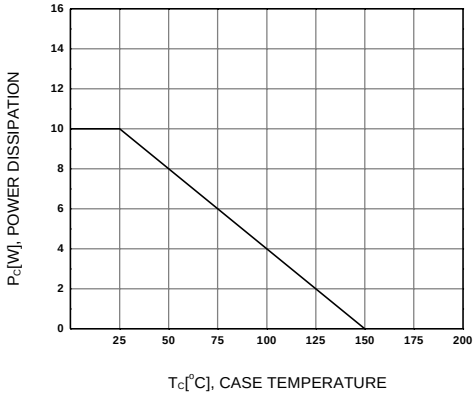
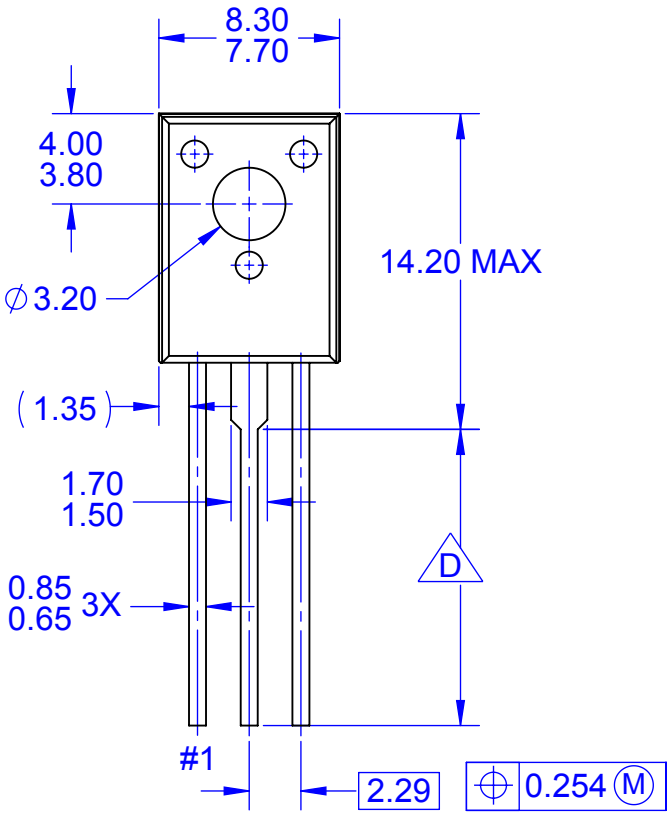
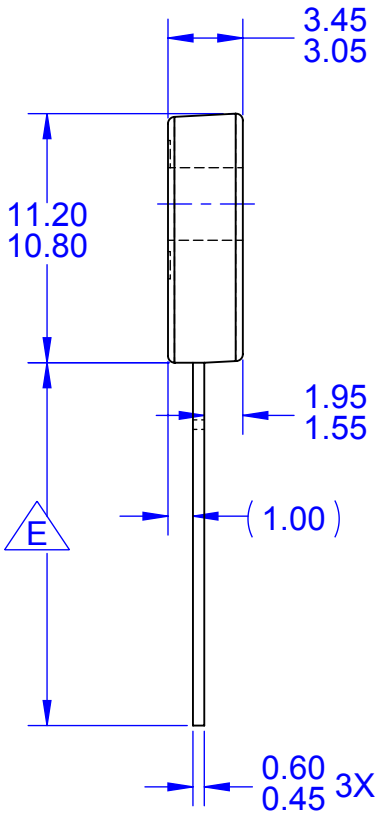


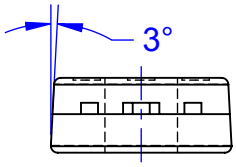
Figure 8. Power Derating



TOP VIEW



SIDE VIEW



FRONT VIEW

PRODUCTION CODE	TERMINAL LENGTH "D"	TERMINAL LENGTH "E"
TSSTU	3.45 - 4.05	6.45-7.45
TSTU	2.36 - 2.96	5.36-6.36
NONE (STD LENGTH)	12.76 - 13.36	15.76-16.76

NOTES:

A. NO INDUSTRY STANDARD APPLIES TO THIS PACKAGE
B. ALL DIMENSIONS ARE IN MILLIMETERS
C. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH, AND TIE BAR PROTRUSIONS

△D FOR TERMINAL LENGTH "D", REFER TO TABLE

△E FOR TERMINAL LENGTH "E", REFER TO TABLE

F. DRAWING FILENAME: MKT-TO126AArev2

FAIRCHILD ™

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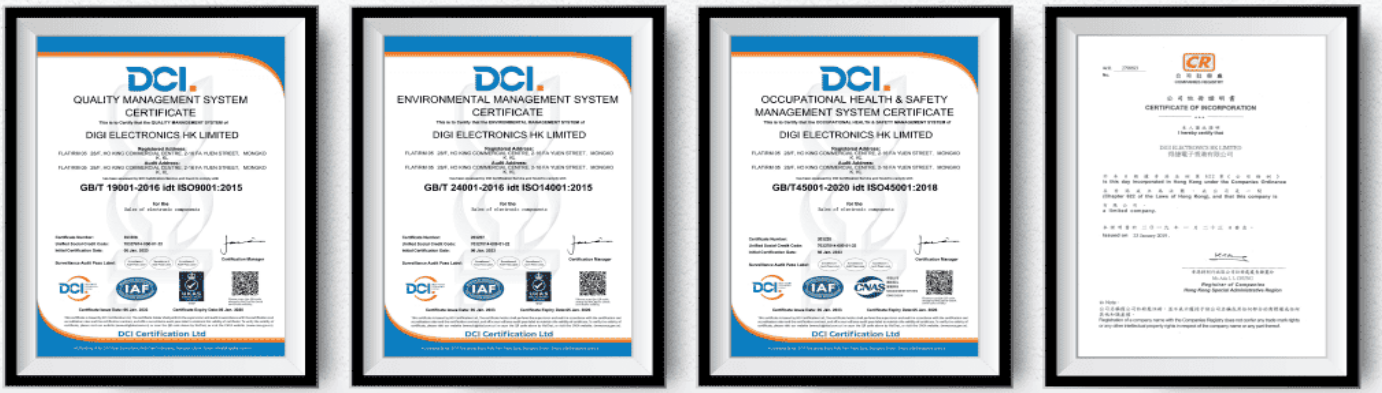

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