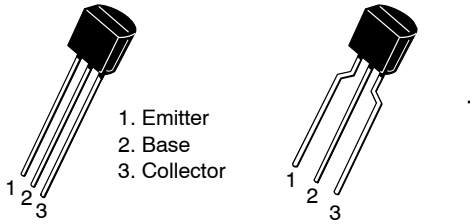
PNP Epitaxial Silicon Transistor

KSA708



TO−92 3
CASE 135AN

TO−92 3 LF
CASE 135AR

Low Frequency Amplifier & Medium Speed Switching

- Complement to KSC1008
- Collector−Base Voltage: V_{CBO} = −80 V
- Collector Power Dissipation: P_C = 800 mW
- Suffix "−C" means Center Collector
  (1. Emitter 2. Collector 3. Base)

MARKING DIAGRAM

A708Y = Specific Device Code
A = Assembly Site
WW = Work Week
Y = Year of Production

ABSOLUTE MAXIMUM RATINGS

(T_A = 25°C unless otherwise noted.)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector−Base Voltage	−80	V
V_{CEO}	Collector−Emitter Voltage	−60	V
V_{EBO}	Emitter−Base Voltage	−8	V
I_C	Collector Current	−700	mA
P_C	Collector Power Dissipation	800	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	−55 to +150	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

ORDERING INFORMATION

Device	Package	Shipping
KSA708YBU	TO−92 3 (Pb−Free)	10000 Units / Bulk
KSA708CYTA	TO−92 3 LF (Pb−Free)	2000 Units / FNFLD
KSA708YTA	TO−92 3 LF (Pb−Free)	2000 Units / FNFLD

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted.)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
BV_{CBO}	Collector−Base Breakdown Voltage	I_C = −100 μA, I_E = 0	−80	−	−	V
BV_{CEO}	Collector−Emitter Breakdown Voltage	I_C = −10 mA, I_B = 0	−60	−	−	V
BV_{EBO}	Emitter−Base Breakdown Voltage	I_E = −100 μA, I_C = 0	−8	−	−	V
I_{CBO}	Collector Cut−off Current	V_{CB} = −60 V, I_E = 0	−	−	−0.1	μA
I_{EBO}	Emitter Cut−off Current	V_{EB} = −5 V, I_C = 0	−	−	−0.1	μA
h_{FE}	DC Current Gain*	V_{CE} = −2 V, I_C = −50 mA	120	−	240	
V_{CE}(sat)	Collector−Emitter Saturation Voltage*	I_C = −500 mA, I_B = −50 mA	−	−0.3	−0.7	V
V_{BE}(sat)	Base−Emitter Saturation Voltage*	I_C = −500 mA, I_B = −50 mA	−	−0.9	1.1	V
f_T	Current Gain Bandwidth Product	V_{CE} = −10 V, I_C = −50 mA	−	50	−	MHz
C_{ob}	Output Capacitance	V_{CB} = −10 V, I_E = 0, f = 1 MHz	−	13	−	pF

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.
*Pulse Test: PW ≤ 350 μs, Duty cycle ≤ 2%.

TYPICAL CHARACTERISTICS

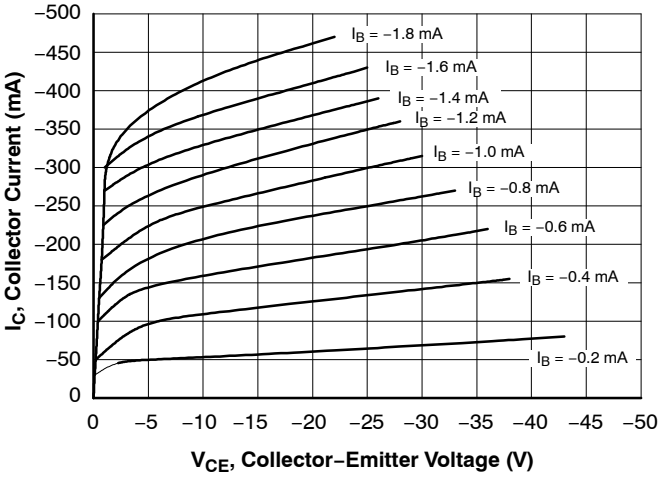


Figure 1. Static Characteristic

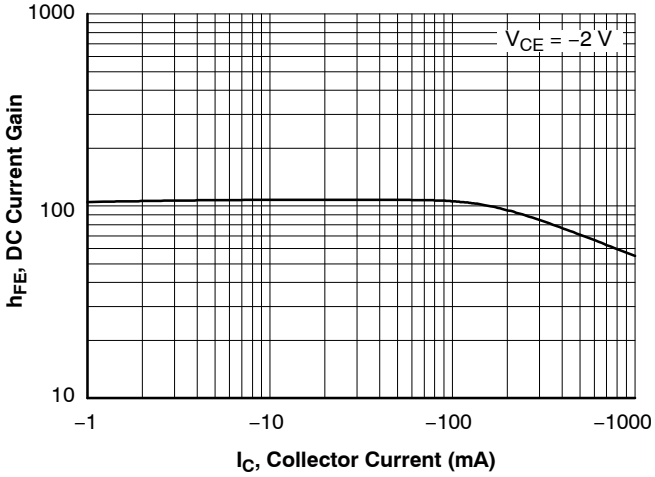


Figure 2. DC Current Gain

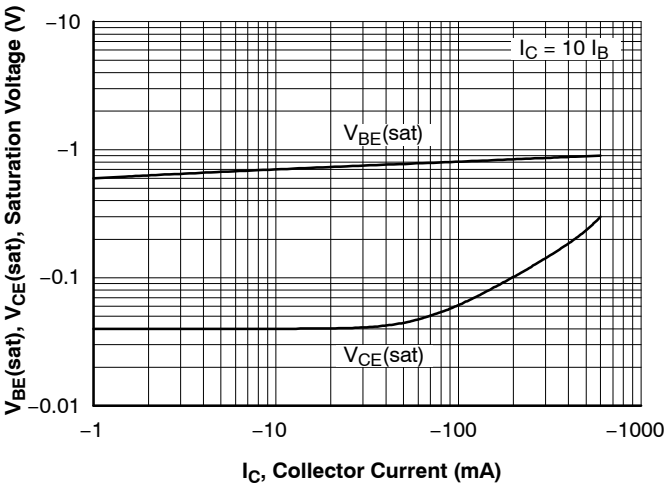


Figure 3. Base−Emitter Saturation Voltage Collector−Emitter Saturation Voltage

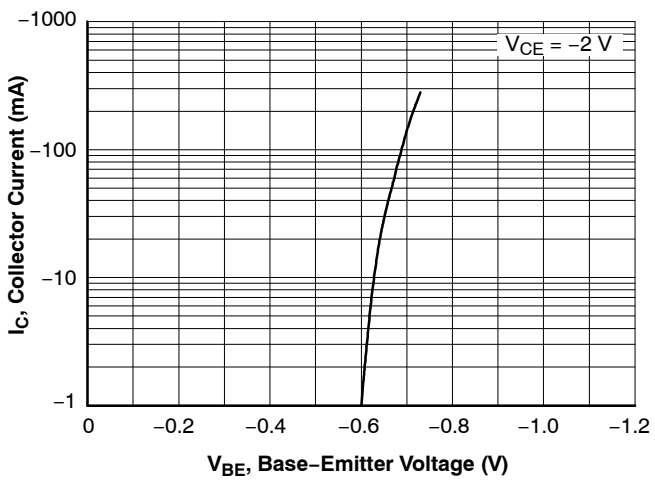


Figure 4. Base−Emitter On Voltage

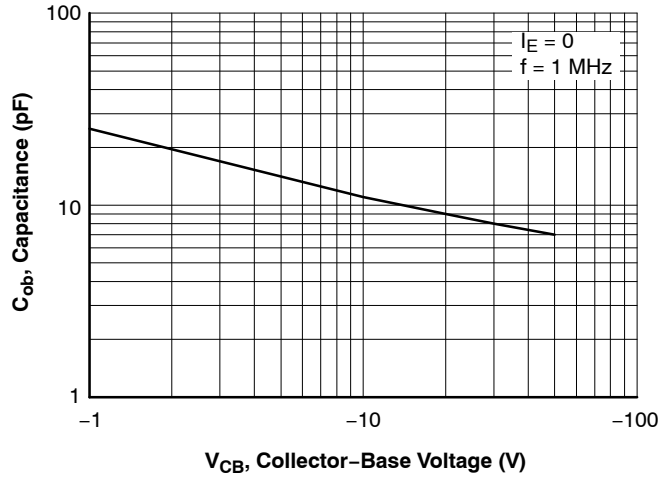


Figure 5. Collector Output Capacitance

TO−92 3 4.825x4.76
CASE 135AN
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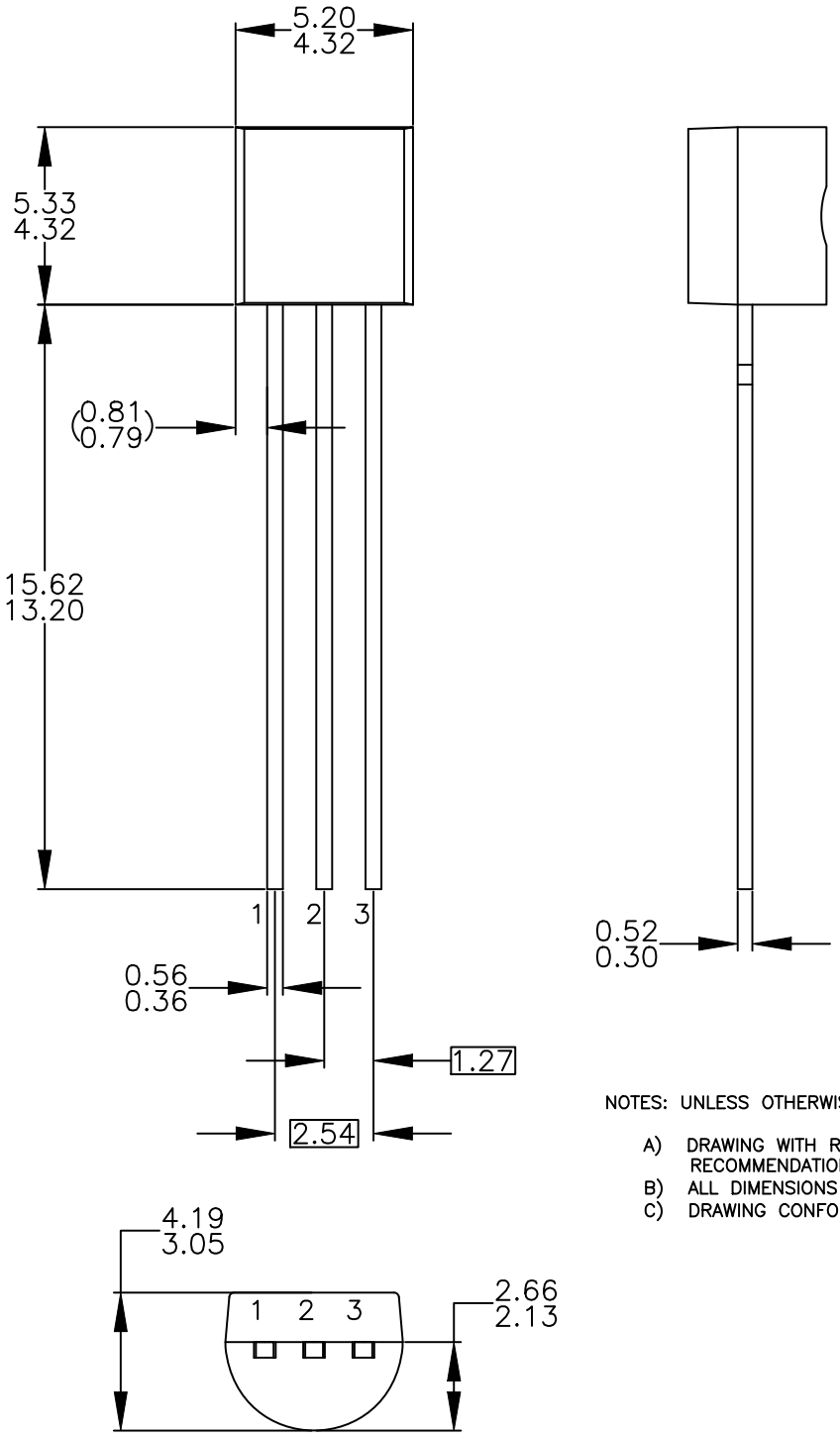
DATE 31 JUL 2016



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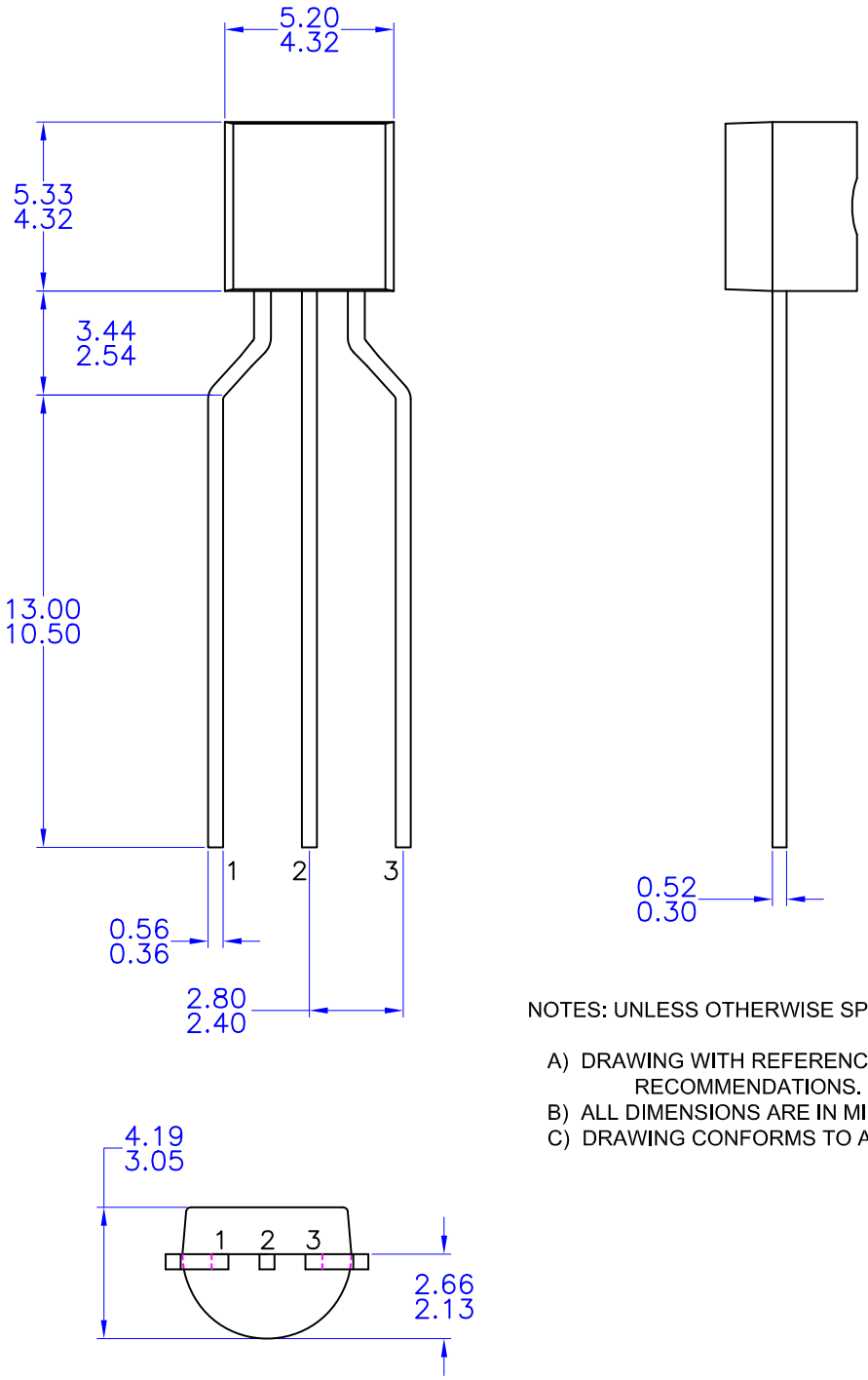
MECHANICAL CASE OUTLINE
PACKAGE DIMENSIONS

ON Semiconductor®

TO−92 3 4.83x4.76 LEADFORMED
CASE 135AR
ISSUE O

DATE 30 SEP 2016



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