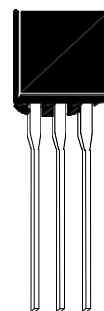


General Purpose PNP Epitaxial Planar Transistor

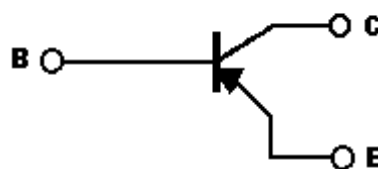
Features:

- The KWA733A3 is designed for use in driver stage of AF amplifier and general purpose amplification.
- High HFE and excellent linearity
- Complementary to KWC945A3.
- Pb-free and halogen-free package

TO-92



E C B



B : Base

C : Collector

E : Emitter

Ordering Information

Device	Package	Shipping
KWA733A3	TO-92 (Pb-free lead plating and halogen-free package)	2000 pcs / Tape & Box
KWA733A3	TO-92 (Pb-free lead plating and halogen-free package)	1000 pcs/ bag, 10 bags/box, 10boxes/carton

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V _{CBO}	-60	V
Collector-Emitter Voltage	V _{CEO}	-50	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current	I _C	-150	mA
Peak Collector Current	I _{CP}	-500	mA
Base Current	I _B	-20	mA
Power Dissipation	P _d	625	mW
Thermal Resistance, Junction to Ambient	R _{θJA}	200	°C/W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55~+150	°C

Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CEO}	-50	-	-	V	I _C =-1mA
I _{CBO}	-	-	-0.1	μA	V _{CB} =-60V
I _{EBO}	-	-	-0.1	μA	V _{EB} =-5V
*V _{CE(sat)}	-	-	-0.3	V	I _C =-100mA, I _B =-10mA
V _{BE}	-0.58	-	-0.68	V	V _{CE} =-6V, I _C =-1mA
h _{FE}	135	-	600	-	V _{CE} =-6V, I _C =-1mA
f _T	100	-	-	MHz	V _{CE} =-6V, I _C =-10mA
C _{ob}	-	-	6	pF	V _{CB} =-10V, f=1MHz

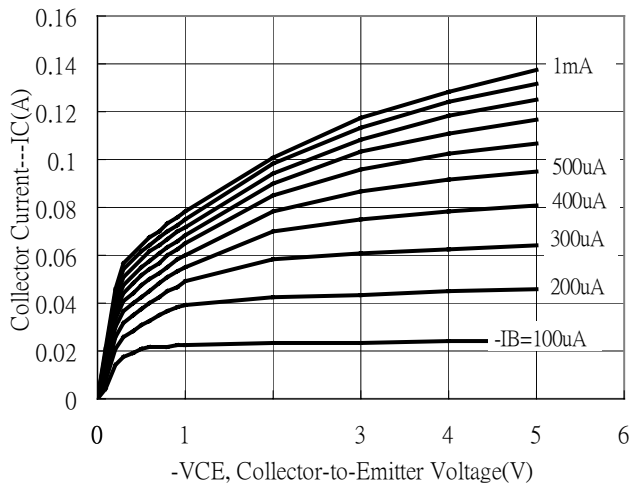
*Pulse Test: Pulse Width ≤380μs, Duty Cycle≤2%

Classification Of h_{FE}

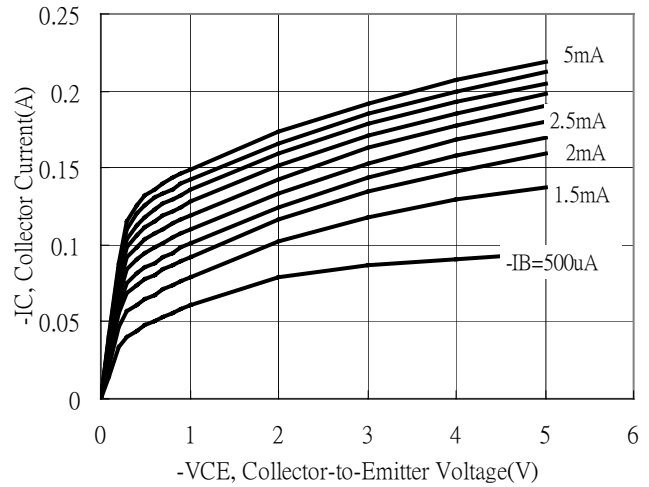
Rank	Q	P	K
Range	135~270	200~400	300~600

Typical Characteristics

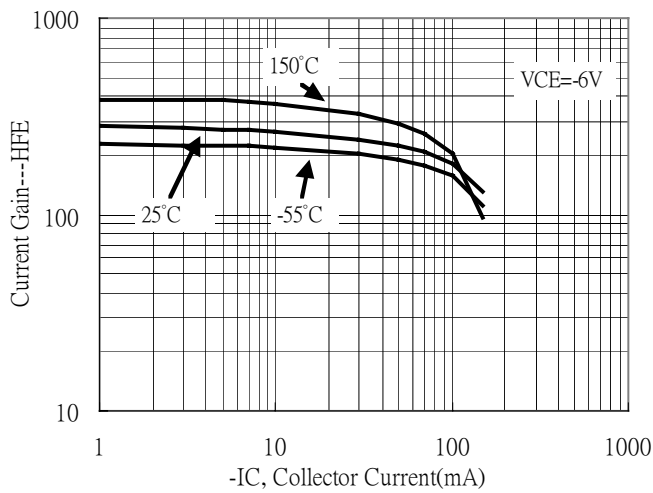
Emitter Grounded Output Characteristics



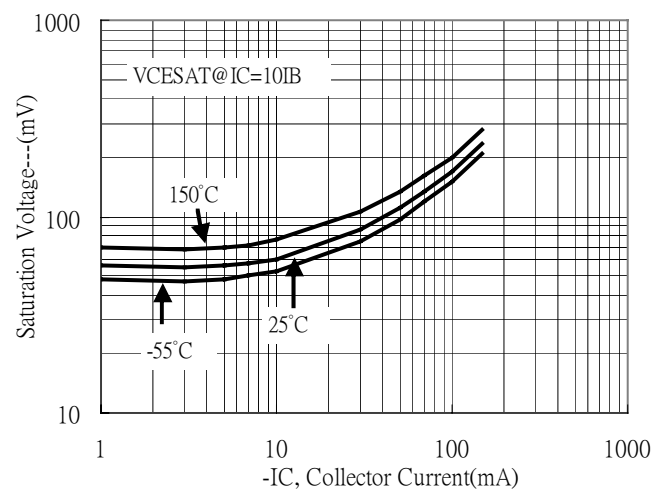
Emitter Grounded Output Characteristics



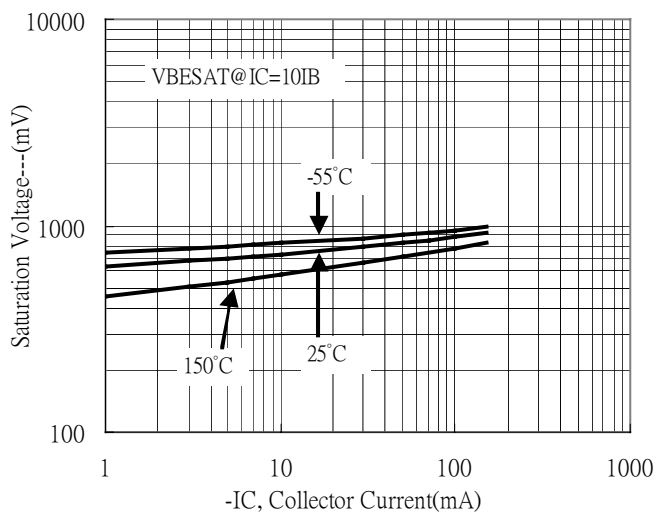
Current Gain vs Collector Current



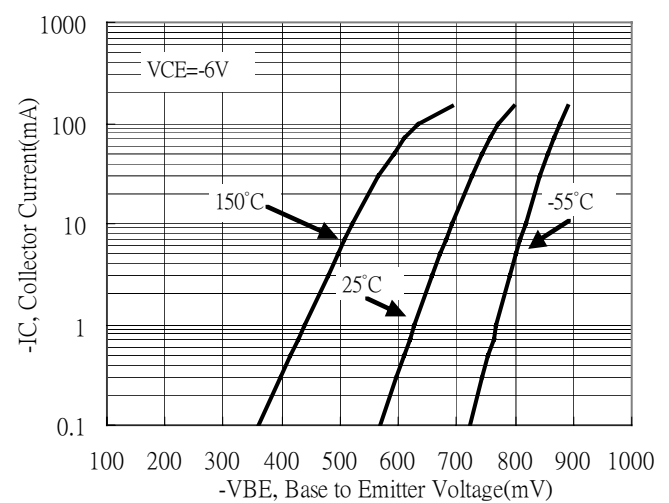
Saturation Voltage vs Collector Current



Saturation Voltage vs Collector Current

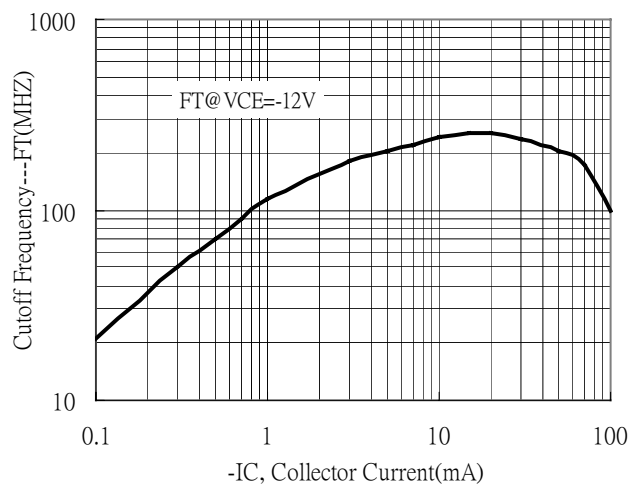


On Voltage vs Collector Current

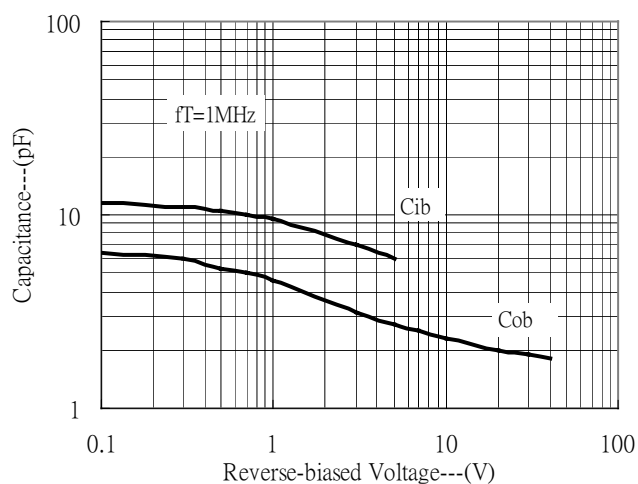


Typical Characteristics

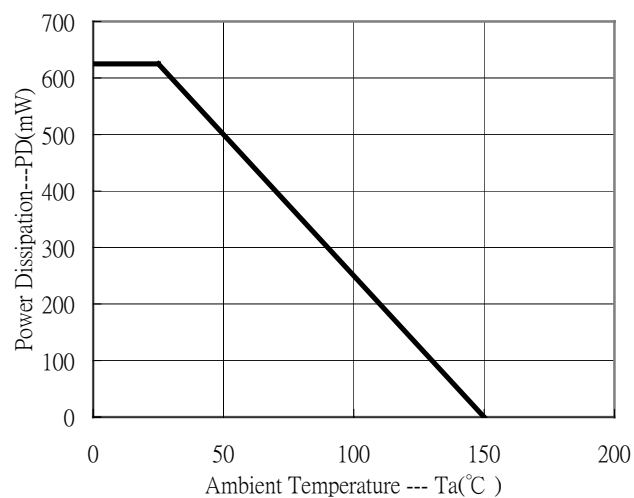
Cutoff Frequency vs Collector Current



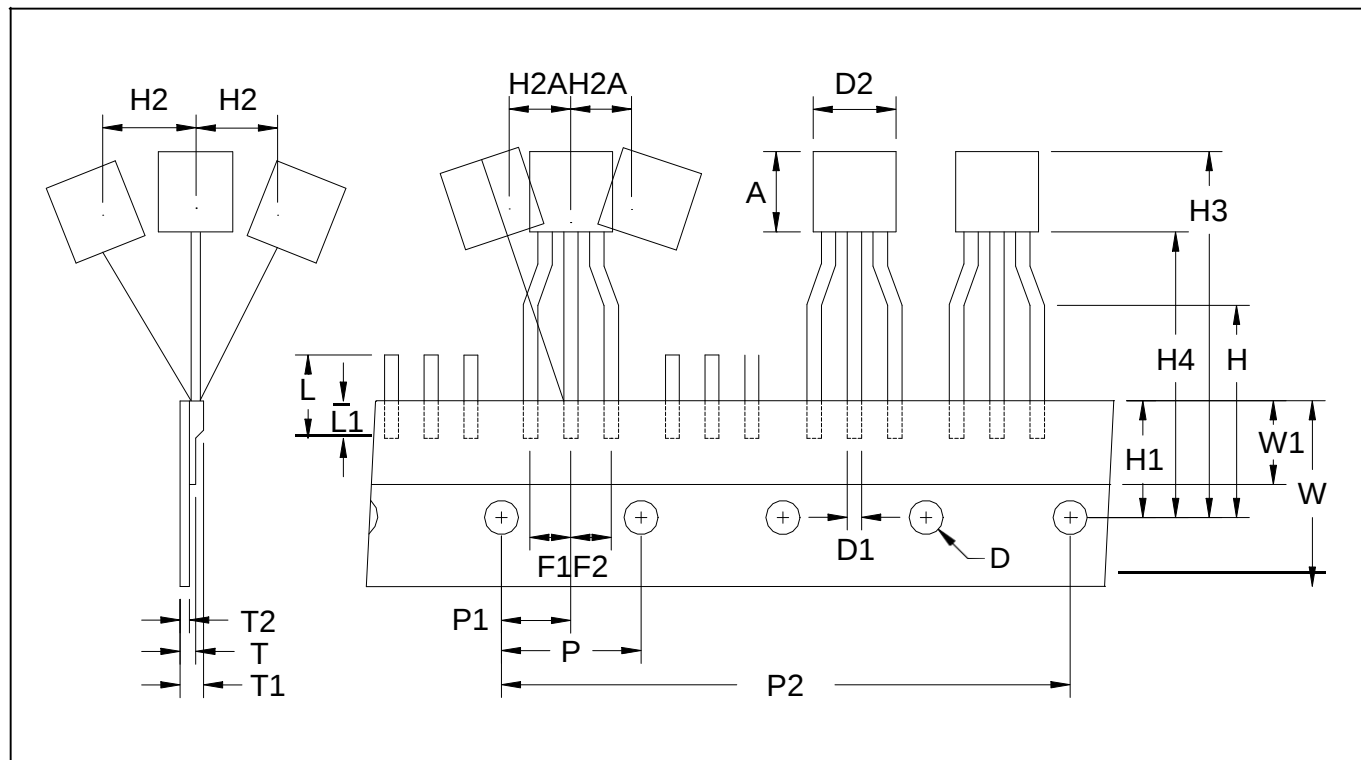
Capacitance Characteristics



Power Derating Curve

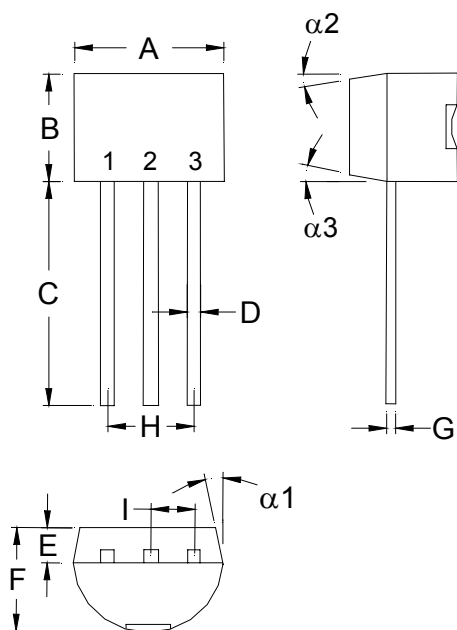


TO-92 Taping Outline

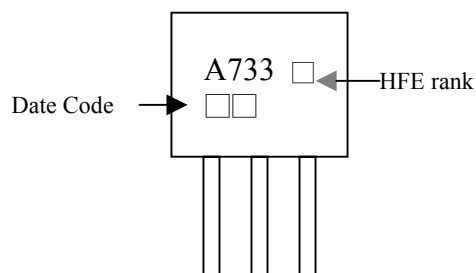


DIM	Item	Millimeters	
		Min.	Max.
A	Component body height	4.33	4.83
D	Tape Feed Diameter	3.80	4.20
D1	Lead Diameter	0.36	0.53
D2	Component Body Diameter	4.33	4.83
F1,F2	Component Lead Pitch	2.40	2.90
F1,F2	F1-F2	-	±0.3
H	Height Of Seating Plane	15.50	16.50
H1	Feed Hole Location	8.50	9.50
H2	Front To Rear Deflection	-	1
H2A	Deflection Left Or Right	-	1
H3	Component Height	-	27
H4	Feed Hole To Bottom Of Component	-	21
L	Lead Length After Component Removal	-	11
L1	Lead Wire Enclosure	2.50	-
P	Feed Hole Pitch	12.50	12.90
P1	Center Of Seating Plane Location	5.95	6.75
P2	4 Feed Hole Pitch	50.30	51.30
T	Over All Tape Thickness	-	0.55
T1	Total Taped Package Thickness	-	1.42
T2	Carrier Tape Thickness	0.36	0.68
W	Tape Width	17.50	19.00
W1	Adhesive Tape Width	5.00	7.00
-	20 pcs Pitch	253	255

TO-92 Dimension



Marking:



Style: Pin 1. Emitter 2. Collector 3. Base

3-Lead TO-92 Plastic Package
 Package Code: A3

*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1704	0.1902	4.33	4.83	G	0.0142	0.0220	0.36	0.56
B	0.1704	0.1902	4.33	4.83	H	-	*0.1000	-	*2.54
C	0.5000	-	12.70	-	I	-	*0.0500	-	*1.27
D	0.0142	0.0220	0.36	0.56	α1	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	α2	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	α3	-	*2°	-	*2°