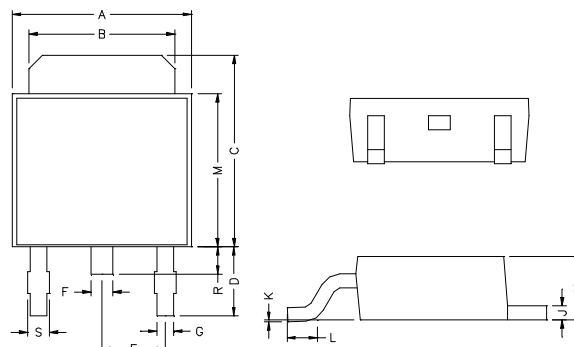
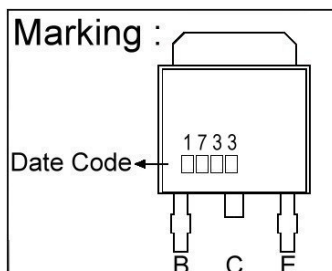


Description

The CZD1733 is designed for power amplifier applications.

Features

- * Low $V_{CE(sat)}$
- Good h_{FE} linearity



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.40	6.80	G	0.50	0.70
B	5.20	5.50	H	2.20	2.40
C	6.80	7.20	J	0.45	0.55
D	2.20	2.80	K	0	0.15
E	2.30 REF.		L	0.90	1.50
F	0.70	0.90	M	5.40	5.80
S	0.60	0.90	R	0.80	1.20

Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	100	V
Collector to Emitter Voltage	V_{CEO}	80	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1	A
Collector Current (Pulse, $P_w=20\text{ms}$, $\text{duty}=1/2$)	I_{CP}	2	A
Total Device Dissipation ($T_A=25^{\circ}\text{C}$)* ¹	P_D	1	W
Total Device Dissipation ($T_c=25^{\circ}\text{C}$)	P_D	10	W
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-55 ~ +150	$^{\circ}\text{C}$

*¹ When mounted on a 40x40x0.7 mm ceramic board.

Electrical Characteristics ($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V_{CBO}	100	-	-	V	$I_C=50\mu\text{A}$, $I_E=0$
V_{CEO}	80	-	-	V	$I_C=1\text{mA}$, $I_B=0$
V_{EBO}	5	-	-	V	$I_E=50\mu\text{A}$, $I_C=0$
I_{CBO}	-	-	1	μA	$V_{CB}=80\text{V}$, $I_E=0$
I_{EBO}	-	-	1	μA	$V_{EB}=4\text{V}$, $I_C=0$
* $V_{CE(sat)}$	-	150	400	mV	$I_C=500\text{mA}$, $I_B=20\text{mA}$
* h_{FE}	82	-	390		$V_{CE}=3\text{V}$, $I_C=500\text{mA}$
f_T	-	100	-	MHz	$V_{CE}=10\text{V}$, $I_E=-50\text{mA}$, $f=100\text{MHz}$
Cob	-	20	-	pF	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$

*Measured under pulse condition. Pulse width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

Classification Of h_{FE}

Rank	P	Q	R
h_{FE}	82 ~ 180	120 ~ 270	180 ~ 390

Characteristics Curve

