

DESCRIPTION

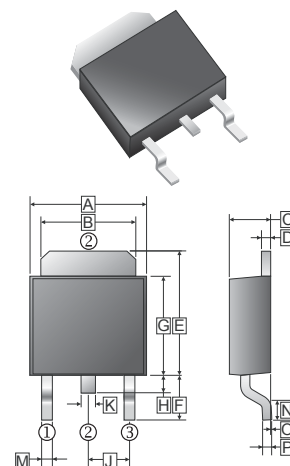
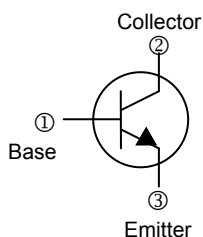
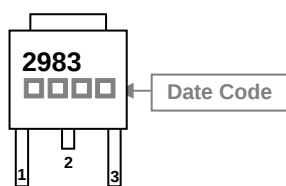
The CZD2983 is designed for power amplifier and driver stage amplifier applications.

D-Pack (TO-252)

FEATURES

- High transition frequency : $f_T = 100\text{MHz}$ (Typ.)
- Complements to CZD1225

MARKING



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.4	6.8	J	2.30	REF.
B	5.20	5.50	K	0.70	0.90
C	2.20	2.40	M	0.50	1.1
D	0.45	0.58	N	0.9	1.6
E	6.8	7.3	O	0	0.15
F	2.40	3.0	P	0.43	0.58
G	5.40	6.2			
H	0.8	1.20			

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	160	V
Collector to Emitter Voltage	V_{CEO}	160	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1.5	A
Base Current	I_B	0.3	A
Total Device Dissipation ($T_A=25^\circ\text{C}$)	P_D	1	W
Total Device Dissipation ($T_C=25^\circ\text{C}$)	P_D	15	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	BV_{CBO}	160	-	-	V	$I_C = 1\text{mA}$, $I_E = 0$
Collector-emitter breakdown voltage	BV_{CEO}	160	-	-	V	$I_C = 10\text{mA}$, $I_B = 0$
Emitter-base breakdown voltage	BV_{EBO}	5	-	-	V	$I_E = 1\text{mA}$, $I_C = 0$
Collector cut-off current	I_{CBO}	-	-	1	A	$V_{CB} = 160\text{V}$, $I_E = 0$
Emitter cut-off current	I_{EBO}	-	-	1	A	$V_{EB} = 5\text{V}$, $I_C = 0$
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	-	-	1.5	V	$I_C = 500\text{mA}$, $I_B = 50\text{mA}$
Base-emitter saturation voltage	$V_{BE(on)}^*$	-	-	1.0	V	$V_{CE} = 5\text{V}$, $I_C = 500\text{mA}$
DC current gain	h_{FE}^	70	-	240		$V_{CE} = 5\text{V}$, $I_C = 100\text{mA}$
Transition frequency	f_T	-	100	-	MHz	$V_{CE} = 10\text{V}$, $I_C = 100\text{mA}$
Output Capacitance	C_{OB}	-	25	-	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	O	Y
Range	70 ~ 140	120 ~ 240

CHARACTERISTIC CURVES

