Elektronische Bauelemente

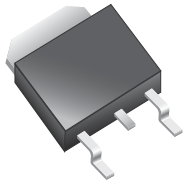
CZD2983

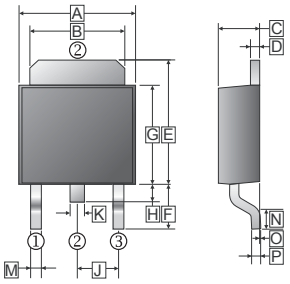
NPN Epitaxial Planar Silicon Transistor

DESCRIPTION

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

D-Pack (TO-252)

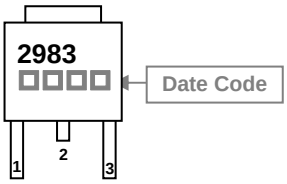


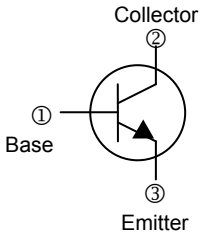


FEATURES

- High transition frequency：f_T = 100MHz (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°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°C)	P_D	1	W
Total Device Dissipation (T_C=25°C)	P_D	15	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55 ~ 150	℃

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

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

*Measured under pulse condition. Pulse width ≦ 300μs, Duty Cycle ≦ 2%

CLASSIFICATION OF hFE

Rank	O	Y
Range	70 ~ 140	120 ~ 240

CHARACTERISTIC CURVES