

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

DESCRIPTION

CZD2983J is designed for power amplifier and driver stage amplifier applications.

FEATURES

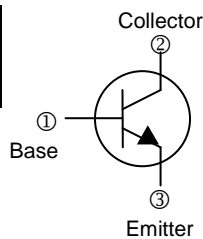
- High transition frequency

CLASSIFICATION OF h_{FE}

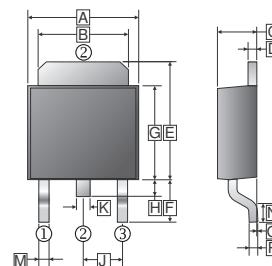
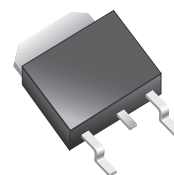
Product-Rank	CZD2983J-O	CZD2983J-Y
Range	70~140	120~240

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-252	2.5K	13 inch



D-Pack (TO-252)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.35	6.90	J	2.186	2.386
B	4.95	5.50	K	0.64	1.14
C	2.10	2.50	M	0.50	1.14
D	0.43	0.9	N	1.3	1.8
E	6.0	7.5	O	0	0.13
F	2.90	REF	P	0.58	REF
G	5.40	6.40			
H	0.60	1.20			

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

Parameter	Symbol	Rating	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
Collector Power Dissipation	P_C	1	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	125	$^\circ\text{C/W}$
Junction and Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector-Base Breakdown Voltage	BV_{CBO}	160	-	-	V	$I_C=1\text{mA}, I_E=0$
Collector-Emitter Breakdown Voltage ¹	BV_{CEO}	160	-	-	V	$I_C=10\text{mA}, I_B=0$
Emitter-Ease Breakdown Voltage	BV_{EBO}	5	-	-	V	$I_E=1\text{mA}, I_C=0$
Collector Cut-Off Current	I_{CBO}	-	-	1	μA	$V_{CB}=160\text{V}, I_E=0$
Emitter Cut-Off Current	I_{EBO}	-	-	1	μA	$V_{EB}=5\text{V}, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	1.5	V	$I_C=500\text{mA}, I_B=50\text{mA}$
Base-Emitter Voltage	V_{BE}	-	-	1	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	$V_{CE}=10\text{V}, I_C=100\text{mA}$
Collector Output Capacitance	C_{OB}	-	25	-	pF	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$

Notes:

1. Pulse test.

CHARACTERISTIC CURVES

Static Characteristic

