

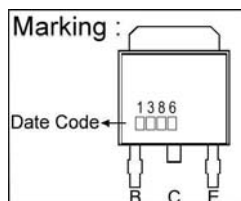
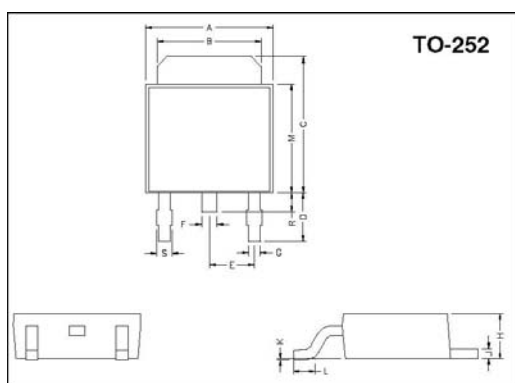
## DESCRIPTION

The CZD1386 is designed for low frequency applications.

## FEATURES†

- Low  $V_{CE(sat)} = -0.55V(Typ.)$  ( $I_C/I_B = -4 A/ -0.1 A$ )
- Excellent DC current gain characteristics

## PACKAGE DIMENSIONS



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	2.40	3.00	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 at $T_a = 25^\circ C$

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	$V_{CBO}$	-30	V
Collector to Emitter Voltage	$V_{CEO}$	-20	V
Emitter to Base Voltage	$V_{EBO}$	-6	V
Collector Current	$I_C$	-5	A
*Collector Current (Pulse)	$I_C$	-10	A
Total Power Dissipation	$P_C$	20	W
Junction, Storage Temperature	$T_J, T_{STG}$	+150, -55 ~ +150	$^\circ C$

## CHARACTERISTICS at $T_a = 25^\circ C$

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-30	-	-	V	$I_C = -50\mu A$
BVCEO	-20	-	-	V	$I_C = -1mA$
BVEBO	-6	-	-	V	$I_E = -50\mu A$
ICBO	-	-	-500	nA	$V_{CB} = -20V$
IEBO	-	-	-500	nA	$V_{EB} = -5V$
*VCE(sat)	-	-	-1	mV	$I_C = -4A, I_B = -0.1mA$
*hFE	82	-	580		$V_{CE} = -2V, I_C = -0.5mA$
fT	-	120	-	MHz	$V_{CE} = -6V, I_E = 50mA, f = 30MHz$
Cob	-	60	-	pF	$V_{CB} = -20V, I_E = 0, f = 1MHz$

\* Pulse Test: Pulse Width  $\leq 380\mu s$ , Duty Cycle  $\leq 2\%$

## CLASSIFICATION OF $h_{FE1}$

Rank	P	Q	R	E
Range	82 - 180	120 - 270	180 - 390	370 - 580

**CHARACTERISTIC CURVES**

