

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

FEATURES

- Suitable for Middle Power Driver
- Low Collector-Emitter Saturation Voltage

MARKING



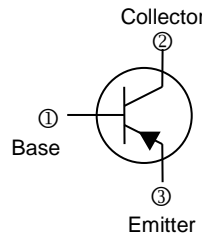
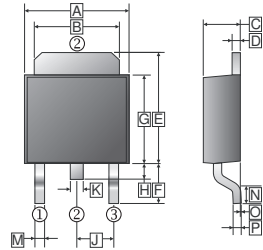
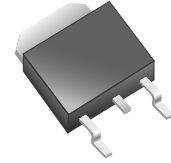
PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-252	2.5K	13 inch

ORDER INFORMATION

Part Number	Type
CZD1952J	Lead (Pb)-free
CZD1952J-C	Lead (Pb)-free and Halogen-free

TO-252 (D-Pack)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.3	6.9	J	2.3 REF.	
B	4.95	5.53	K	0.89 REF.	
C	2.1	2.5	M	0.45	1.14
D	0.4	0.9	N	1.55 Typ.	
E	6	7.7	O	0	0.15
F	2.90 REF.		P	0.58 REF.	
G	5.4	6.4			
H	0.6	1.2			

ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V _{CBO}	-100	V
Collector-Emitter Voltage	V _{CEO}	-60	
Emitter-Base Voltage	V _{EBO}	-5	
Collector Current	I _C	-5	A
Power Dissipation	P _D	1	W
Thermal Resistance, Junction-Ambient	R _{θJA}	125	°C/W
Operating Junction & Storage Temperature Range	T _J , T _{STG}	-55~150	°C

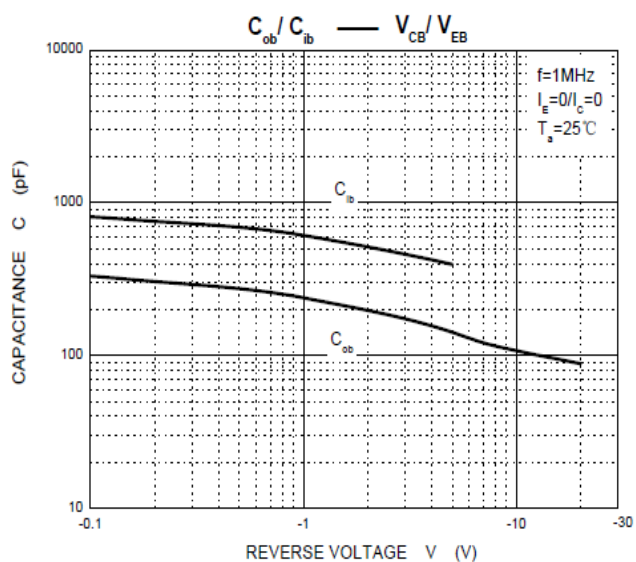
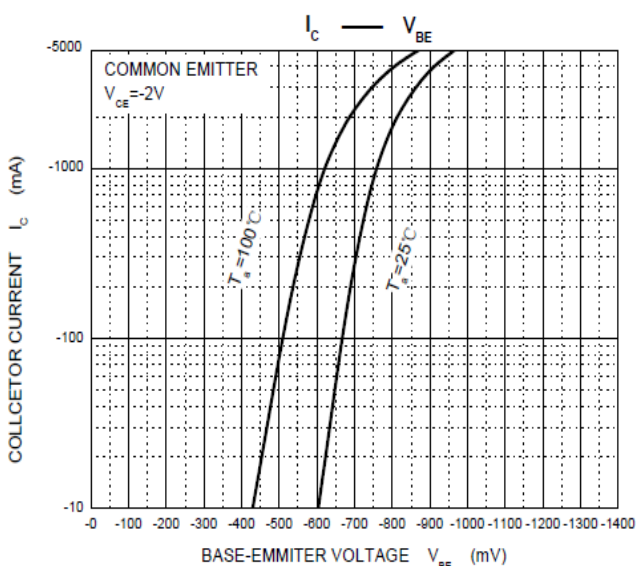
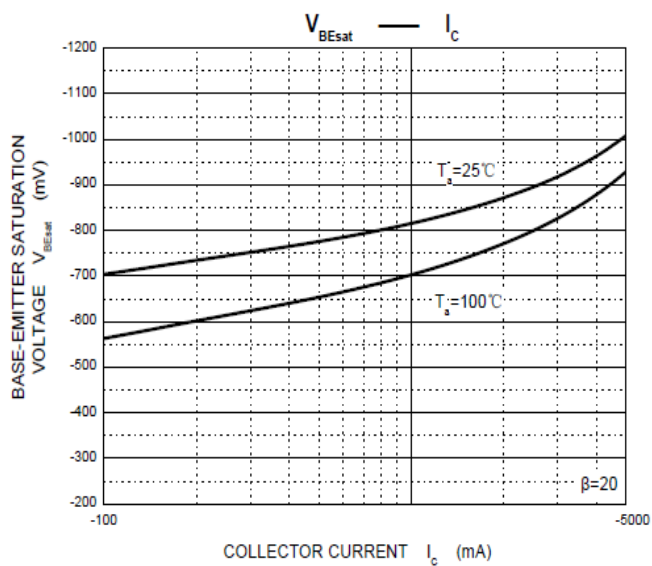
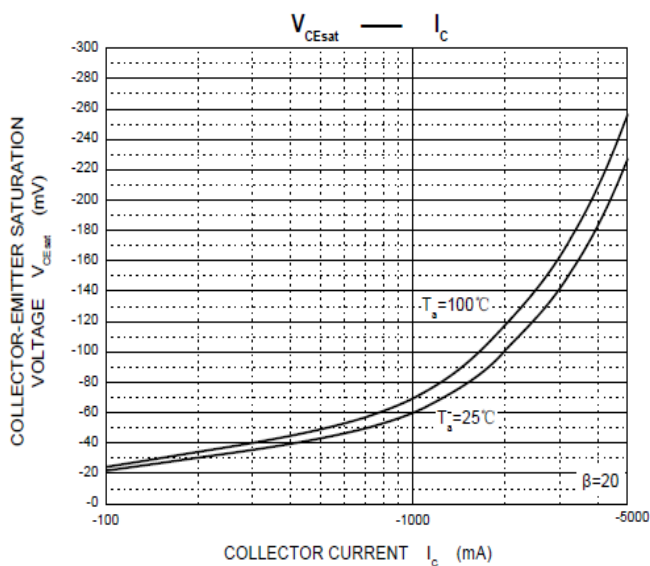
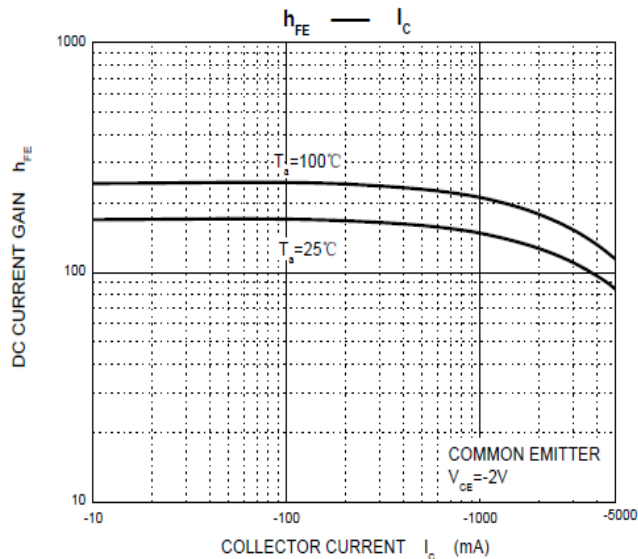
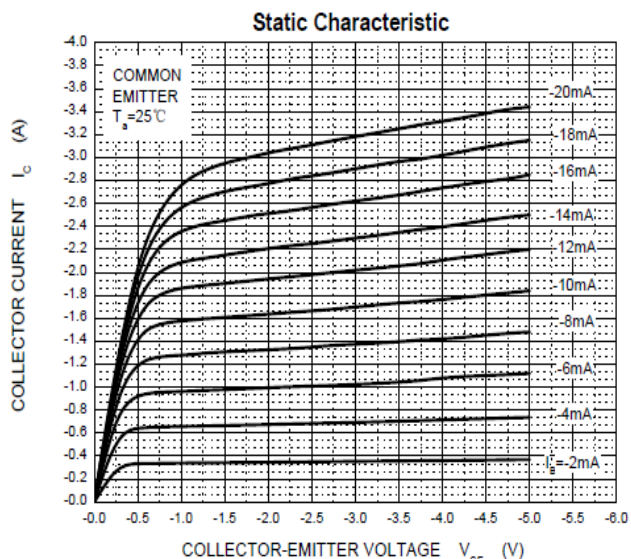
ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV _{CBO}	-100	-	-	V	I _C = -50μA, I _E =0
Collector-Emitter Breakdown Voltage	BV _{CEO}	-60	-	-		I _C = -1mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EBO}	-5	-	-		I _E = -50μA, I _C =0
Collector Cut-off Current	I _{CBO}	-	-	-10	μA	V _{CB} = -100V, I _E =0
Emitter Cut-off Current	I _{EBO}	-	-	-10		V _{EB} = -5V, I _C =0
DC Current Gain	h _{FE}	120	-	270		V _{CE} = -2V, I _C = -1A
		40	-	-		V _{CE} = -2V, I _C = -3A
Collector-Emitter Saturation Voltage	V _{CE(sat)}	-	-	-0.3	V	I _C = -3A, I _B = -0.15A
	V _{CE(sat)}	-	-	-0.5		I _C = -4A, I _B = -0.2A
Base-Emitter Saturation Voltage	V _{BE(on)}	-	-	-1.2	V	I _C = -3A, I _B = -0.15A
	V _{BE(on)}	-	-	-1.5		I _C = -4A, I _B = -0.2A
Collector Output Capacitance	C _{ob}	-	130	-	pF	V _{CB} = -10V, I _E =0, f=1MHz
Transition Frequency	f _T	-	80	-	MHz	V _{CE} = -10V, I _E = -0.5A, f=30MHz
Turn-on Time	T _{on}	-	0.3	-	μS	V _{CC} = -30V, I _C = -3A, I _{B1} = -I _{B2} =0.15A
Storage Time	T _s	-	1.5	-		
Fall Time	T _f	-	0.3	-		

Note:

1. Pulse Test: Pulse Width≤300μs, duty cycle≤2%.

CHARACTERISTIC CURVES



CHARACTERISTIC CURVES

