Elektronische Bauelemente

CZD1952

-6A, -100V

PNP High Speed Switching Transistor

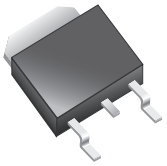
RoHS Compliant Product

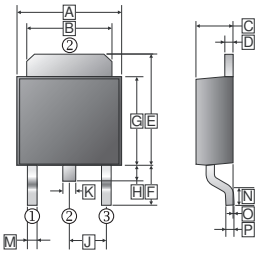
A suffix of "-C" specifies halogen & lead-free

DESCRIPTION

CZD1952 is designed for high speed switching applications.

TO-252 (D-Pack)

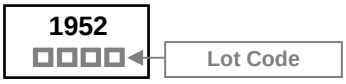




FEATURES

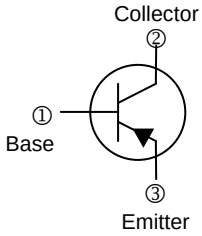
- Wide SOA
- Low Saturation Voltage
- High Speed Switching

MARKING



PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-252	2.5K	13 inch



REF.	Millimeter Min.	Millimeter Max.	REF.	Millimeter Min.	Millimeter 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			

ORDER INFORMATION

Part Number	Type
CZD1952	Lead (Pb)-free
CZD1952-C	Lead (Pb)-free and Halogen-free

ABSOLUTE MAXIMUM RATINGS (T_A=25℃ unless otherwise specified)

Parameter		Symbol	Ratings	Unit
Collector-Base Voltage		V_{CBO}	-100	V
Collector-Emitter Voltage		V_{CEO}	-60	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current	DC	I_C	-6	A
	Pulse		-10	
Total Power Dissipation	T_A=25℃	P_D	1	W
	T_C=25℃		10	
Operating Junction and Storage Temperature Range		T_J, T_{STG}	-55~150	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃ 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	-	-	V	I_C= -1mA, I_B=0
Emitter-Base Breakdown Voltage	BV_{EBO}	-5	-	-	V	I_E= -50μA, I_C=0
Cut-off Current	I_{CES}	-	-	-10	μA	V_{CE}= -100V, V_{EB}=0
Emitter Cut-off Current	I_{EBO}	-	-	-10	μA	V_{EB}= -5V, I_C=0
Collector-Emitter Saturation Voltage	$V_{CE(sat)1}$	-	-	-0.3	V	I_C= -3A, I_B= -0.15A
	$V_{CE(sat)2}$	-	-	-0.5		I_C= -4A, I_B= -0.2A
Base-Emitter Voltage	$V_{BE(on)1}$	-	-	-1.2	V	I_C= -3A, I_B= -0.15A
	$V_{BE(on)2}$	-	-	-1.5		I_C= -4A, I_B= -0.2A
DC current gain	$h_{FE(1)}$	120	-	320		V_{CE}= -2V, I_C= -1A
	$h_{FE(2)}$	40	-	-		V_{CE}= -2V, I_C= -3A
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	I_C= -3A,R_L=10Ω
Storage Time	T_{stg}	-	-	1.5		I_{B1}= -I_{B2}= -0.15A
Fall Time	T_f	-	-	0.3		V_{CC}= -30V

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CHARACTERISTIC CURVES