Elektronische Bauelemente

CZD13003

1.5A , 700V

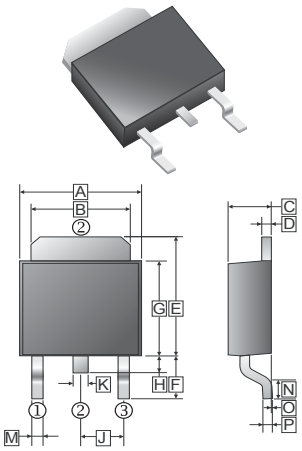
NPN Plastic Encapsulated Transistor

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

FEATURES

- Power Switching Applications

TO-252

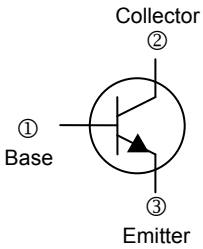


CLASSIFICATION OF ts

Rank	A1	A2	B1	B2
Range	2~2.5(μs)	2.5~3(μs)	3~3.5(μs)	3.5~4(μs)

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-252	2.5K	13 inch



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.35	6.80	J	2.30 REF.	
B	4.95	5.50	K	0.64	1.14
C	2.15	2.40	M	0.50	0.95
D	0.43	0.9	N	1.3	1.8
E	6.4	7.5	O	0	0.15
F	2.40	3.0	P	0.58REF.	
G	5.40	6.25			
H	0.60	1.20			

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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	700	V
Collector to Emitter Voltage	V_{CEO}	400	V
Emitter to Base Voltage	V_{EBO}	9	V
Collector Current - Continuous	I_C	1.5	A
Collector Power Dissipation	P_C	1.25	W
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	700	-	-	V	I_C=1mA, I_E=0
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	400	-	-	V	I_C=10mA, I_B=0
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	9	-	-	V	I_E=1mA, I_C=0
Collector Cut – Off Current	I_{CBO}	-	-	1	mA	V_{CB}=700V, I_E=0
Collector Cut – Off Current	I_{CEO}	-	-	0.5	mA	V_{CE}=400V, I_B=0
Emitter Cut – Off Current	I_{EBO}	-	-	1	mA	V_{EB}=9V, I_C=0
DC Current Gain	$h_{FE\ (1)}$	20	-	30		V_{CE}=5V, I_C=0.5A
	$h_{FE\ (2)}$	5	-	-		V_{CE}=5V, I_C=1.5A
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.6	V	I_C=1A, I_B=250mA
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	1.2	V	I_C=1A, I_B=250mA
Base-emitter voltage	V_{BE}	-	-	3	V	I_E=2A
Transition Frequency	f_T	-	5	-	MHz	V_{CE}=10V, I_C=100mA, f =1MHz
Fall time	t_f	-	0.5	-	μs	I_C=1A, I_{B1}= -I_{B2}=0.2A,V_{CC}=100V
Storage time	t_S	2	-	4	μs	I_C=250mA

CHARACTERISTIC CURVE

