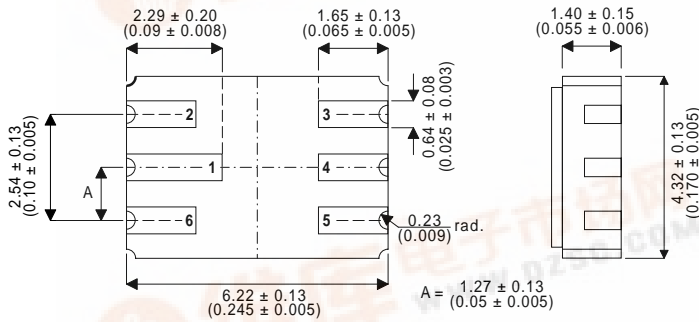


ZTX753DCSM

PNP DUAL TRANSISTOR IN A HERMETICALLY SEALED CERAMIC SURFACE MOUNT PACKAGE FOR HIGH RELIABILITY APPLICATIONS

MECHANICAL DATA

Dimensions in mm (inches)



FEATURES

- DUAL SILICON PLANAR PNP TRANSISTORS
- HERMETIC SURFACE MOUNT PACKAGE
- CECC SCREENING OPTIONS
- SPACE QUALITY LEVEL OPTIONS

LCC2 PACKAGE Underside View

- PAD 1 – Collector 1
- PAD 2 – Base 1
- PAD 3 – Base 2
- PAD 4 – Collector 2
- PAD 5 – Emitter 2
- PAD 6 – Emitter 1

ABSOLUTE MAXIMUM RATINGS PER SIDE (T_C = 25°C unless otherwise stated)

V _{CBO}	Collector – Base Voltage	-120V
V _{CEO}	Collector – Emitter Voltage	-100V
V _{EBO}	Emitter – Base Voltage	-5V
I _{CM}	Peak Pulse Current	-6A
I _C	Continuous Collector Current	-2A
P _{TOT}	Power Dissipation @ T _{amb} = 25°C	1W
	Derate above 25°C	8mW/°C
T _J T _{STG}	Operating And Storage Temperature Range	-55 to 150°C
R _{θJA}	Junction - Ambient Thermal Resistance	125°C/W



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

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
$V_{(BR)CBO}$	Collector – Base Breakdown Voltage $I_C = 100\mu\text{A}$	-120			V
$V_{(BR)CEO}$	Collector – Emitter Breakdown Voltage $I_C = 10\text{mA}$	-100			
$V_{(BR)EBO}$	Emitter – Base Breakdown Voltage $I_E = -100\mu\text{A}$	-5			
I_{CBO}	Collector – Cut-off Current $V_{CB} = -100\text{V}$ $T = 100^\circ\text{C}$			-0.1 -10	μA
I_{EBO}	Emitter Cut-off Current $V_{EB} = -4\text{V}$			-0.1	
$V_{CE(sat)}$	Collector – Emitter Saturation Voltage $I_C = -500\text{mA}$ $I_B = -50\text{mA}^*$ $I_C = -1\text{A}$ $I_B = -100\text{mA}^*$ $I_C = -2\text{A}$ $I_B = -200\text{mA}^*$		-0.2	-0.3	V
			-0.35	-0.5	
			-0.8	-1.0	
$V_{BE(sat)}$	Base – Emitter Saturation Voltage $I_C = -1\text{A}$ $I_B = -100\text{mA}^*$		-1.0	-1.3	
$V_{BE(on)}$	Base – Emitter Turn-On Voltage $I_C = -1\text{A}$ $V_{CE} = -2\text{V}^*$		-0.95	-1.2	
H_{FE}	DC Current Gain $I_C = -50\text{mA}$ $V_{CE} = -2\text{V}^*$ $I_C = -500\text{mA}$ $V_{CE} = 2\text{V}^*$ $I_C = -1\text{A}$ $V_{CE} = -2\text{V}^*$ $I_C = -2\text{A}$ $V_{CE} = -2\text{V}^*$	70	200		—
		100	200	300	
		55	110		
		25	55		

* Pulse test $t_p = 300\text{ms}$, $\delta \leq 2\%$

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

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
f_T	Transition Frequency $I_C = -100\text{mA}$ $V_{CE} = -5\text{V}$ $f = 100\text{MHz}$	100	140		MHz
C_{obo}	Output Capacitance $V_{CB} = -10\text{V}$ $f = 1.0\text{MHz}$			30	pF
T_{on}	Switching Times $I_C = -500\text{mA}$ $V_{CC} = 10\text{V}$		40		ns
T_{off}	Switching Times $I_{B1} = I_{B2} = 50\text{mA}$		600		