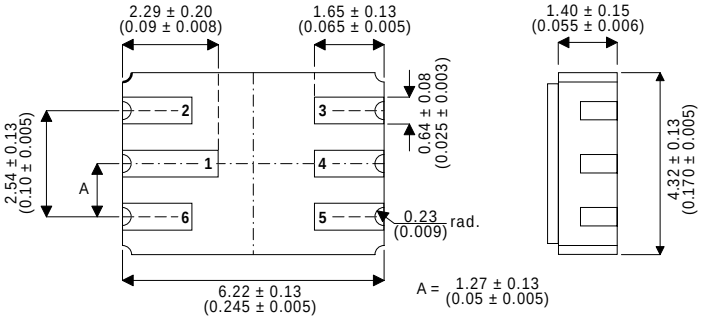
ZTX753DCSM

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

MECHANICAL DATA
Dimensions in mm (inches)



LCC2 PACKAGE
Underside View

FEATURES

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

PAD 1 – Collector 1	PAD 4 – Collector 2
PAD 2 – Base 1	PAD 5 – Emitter 2
PAD 3 – Base 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_jT_{STG}	Operating And Storage Temperature Range	–55 to 150°C
$R_{\theta J\text{-}A}$	Junction - Ambient Thermal Resistance	125°C/W

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Issue 3

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

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

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

DYNAMIC CHARACTERISTICS (T_A = 25°C unless otherwise stated)

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