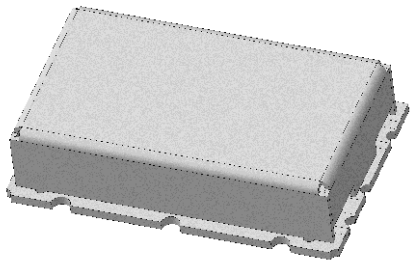
MCS-TDST-0920-SMT
Smoothly Tunable Time Delay

General Description

MCS-TDST-0920-SMT is smoothly tunable L-band time delay. Designed for use in the transceiver modules phased array antenna. Has a high linearity of phase characteristics and temperature stability.



Key Features

- Operating temperature range -20…+60ºC
- Suitable for broadband signals
- High dynamic range
- Small size and weight

Application

- Rx and Tx modules of antenna phased arrays
- Mobile communication systems
- Space communication systems

Specification (at 25°C)

Parameter	Sym.	Min.	Typ.	Max.	Unit
Frequency bandwidth*	F	1000		1500	MHz
Insertion loss 900 MHz 1200 MHz 1400 MHz 2000 MHz	S_{21}	1.8 1.9 2.2 4.3		4 5.1 5.8 9.3	dB
Input / Output VSWR	S_{11}/S_{22}		1.5:1	2:1	
Control voltage		0		15	V
Time adjustment range			650		ps
LDVP 900 - 1200 MHz 1200 - 1400 MHz 1400 - 1600 MHz 1600 - 1800 MHz 1800 - 2000 MHz				± 3 ± 1 ± 1.4 ± 1.4 ± 1.4	(º)
Wave impedance Input / Output	Z		50		?
Operating temperature range		-20		+60	ºC
Time delay deviation 0ºC@+25 ºC			+1.5		ps
Time delay deviation +50 ºC@+25 ºC			-3.5		ps
* - parameter can be changed according to customer requirements					

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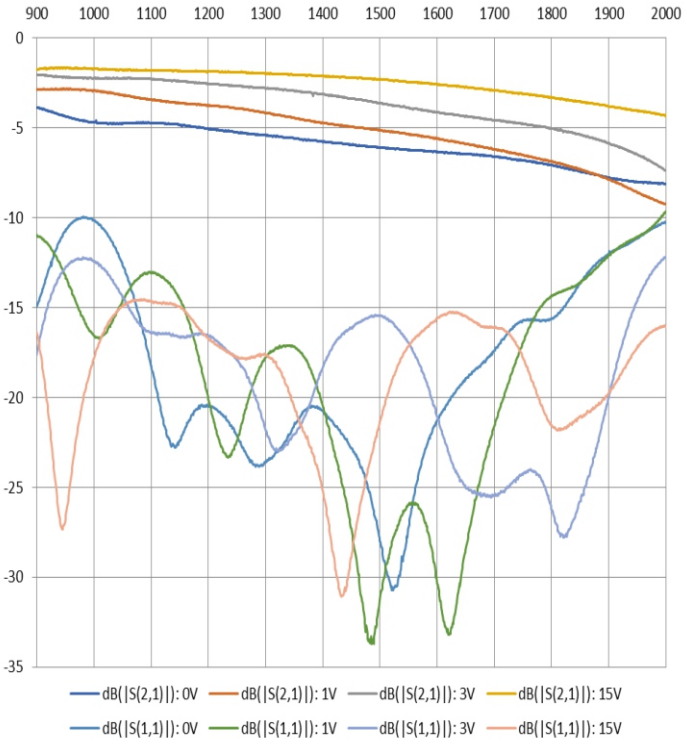
Absolute maximum parameters

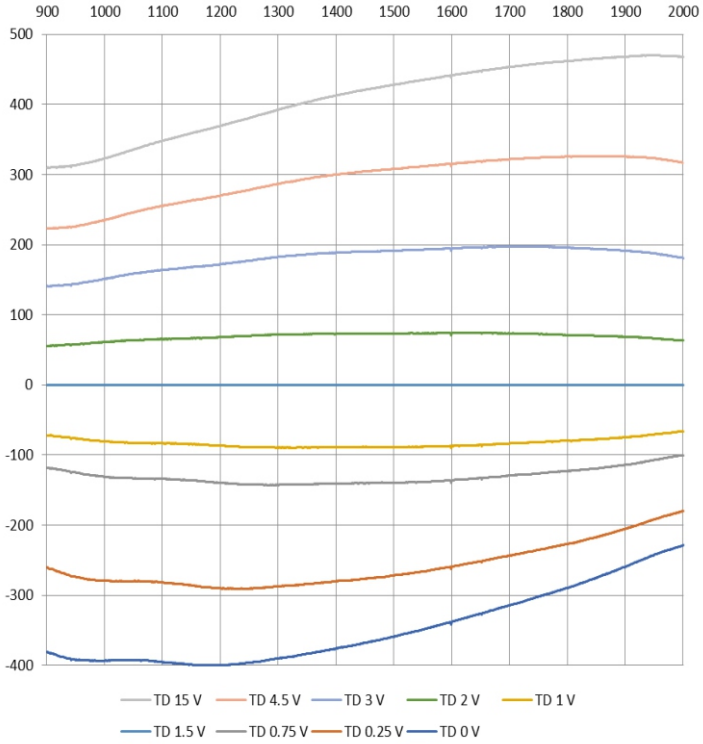
Parameter	Sym.	Value	Unit
Input power	P_{in}	0.2	W

S – Parameters

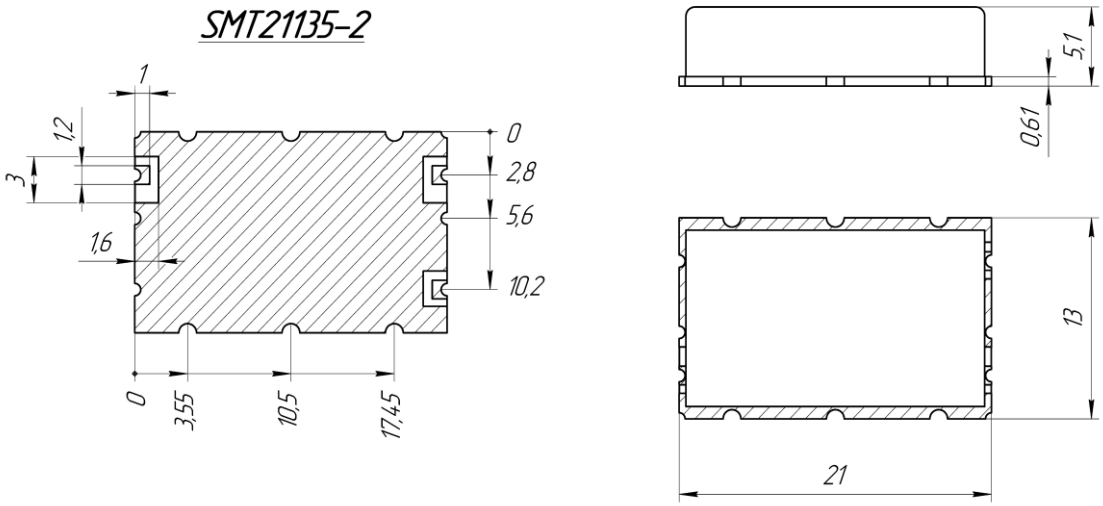
In-Band Response (900 – 2000 MHz)



Phase Time Delay (900 – 2000 MHz)



Physical dimensions



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