

## Industrial Grade SLC NAND Flash 3.0 Micro SD Card

Military/Defense, Aerospace, Surveillance, Marine Navigation, Communication Networking, Medical

- Embedded Mode
- DCS Power Loss Protection
- End to End Data Protection
- Wear Leveling & Bad Block Detection
- S.M.A.R.T. Enable (Life Time Monitoring)
- Auto Refresh Read Disturb Protector
- CID Product Name, Serial Numbers (Optional)
- ISO9001 / ISO14001 / ISO27001 / OHSAS18001
- Meet AEC-Q100 Grade 3
- Comply with Secure Digital Association / SDA standard
- Conforms to ISO7816-1 UV Guard & X-Ray Proof
- Extreme Rugged, Vibration, Water and Shock Resistant
- Fixed BOM, Made In Taiwan



TS Connect Industrial MicroSD Cards Series are Designed for demanding Industrial applications, such as Embedded, Military/ Defence, Aerospace, Surveillance, Marine Navigation, Automotive, Communication Equipment, Networking and Medical Equipment.

The MicroSD Series is equipped with High-Performance distributed Writing Function using a Global Static Wear Leveling Algorithm. The products achieve Industry-Leading Storage Life, Reliability, Durability, and Data Integrity.

Technical Shortform Specification								
	Capacities:		1GB		2GB	4GB		
Electrical Data	Interface:		8-pin. Support Version 2.0 and 3.0					
	Transfer Rate (SLC):		Read: 50MB/s		V	Write: 40MB/s		
	DC Voltage Input:		2.7-3.6Vdc					
	Power Consumption:		100mA (Typical.)					
Environmental Data	Operating TEMP.:		Commercial: -25°C to +85°C Inc		Industria	Industrial/MIL: -40°C to +85°C		
	Storage TEMP.:		-40°C to +85°C					
	Humidity:		10% to 95% Non Consending					
Reliability Data	IP Grade:		IPX7					
	Vibration:		5G (10-500Hz	)	20G (60-2000Hz)			
	Shock:		1500G (0.5mS)					
	ESD Protection:		4kV					
	Endurance:		>2.000.000 Cycles					
	Program/Erase Cycles:		SLC: >100.000 Times					
	Data Retention:		>10 Years Minimum					
	Insertion Reliability:		>10.000 Times Minimum					
	MTBF:		>3.000.000 Hours Minimum					
Mechanical	Dimensions (L x W x H):		15 x 11 x 1mm					
	Weight:		1g (microSD Card	Only)	6g (micr	oSD with Small Case)		
Ordering Information/Partnumber								
Capacities			SLC (-25°C)		SI	LC (-40°C)		
1GB		TFPX001GC6-TSC		TFPX001GI6-TSC				
2GB		TFPX002GC6-TSC			TFPX002GI6-TSC			
4GB		TFPX004GC6-TSC		TFP	K004GI6-TSC			

<sup>\*</sup> For Complete Datasheet and Drawing Please Contact TS Connect AB / Power Outlet

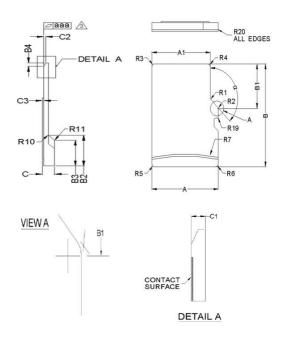
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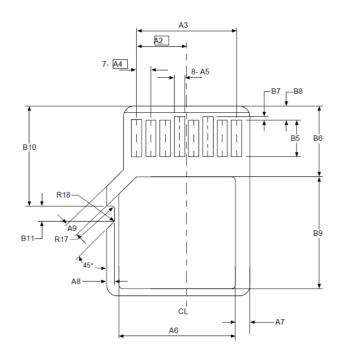


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## **Mechanical Drawings**





	COMMO			
SYMBOL	MIN	NOM	MAX	NOTE
A	10.90	11.00	11.10	
A1	9.60	9.70	9.80	
A2	-	3.85	-	BASIC
A3	7.60	7.70	7.80	
A4	-	1.10		BASIC
A5	0.75	0.80	0.85	
A6	-	-	8.50	
A7	0.90	-	-	
A8	0.60	0.70	0.80	
A9	0.80	0.70	0.00	
A10	1.35	1.40	1.45	
	6.50	6.60	6.70	
A11 A12	0.50	0.55	0.60	
A13	0.40	0.45	0.50	
	14.90	15.00	15.10	
B1	6.30	6.40	6.50	
B2	1.64	1.84	2.04	
B3	1.30	1.50	1.70	
B4	0.42	0.52	0.62	
B5	2.80	2.90	3.00	
B6	5.50		15	
B7	0.20	0.30	0.40	
B8	1.00	1.10	1.20	
B9			9.00	
B10	7.80	7.90	8.00	
B11	1.10	1.20	1.30	
B12	3.60	3.70	3.80	
B13	2.80	2.90	3.00	
B14	8.20		15	
B15	-	-0	6.20	
C	0.90	1.00	1.10	
Cl	0.60	0.70	0.80	
C2	0.20	0.30	0.40	
C3	0.00	-	0.15	
D1	1.00		-	
D2	1.00		-	
D3	1.00	-	-	
R1	0.20	0.40	0.60	
R2	0.20	0.40	0.60	
R3	0.70	0.80	0.90	
R4	0.70	0.80	0.90	
R5	0.60	0.80	0.90	
R6	0.60	0.80	0.90	
R7	29.50	30.00	30.50	
	29.30	0.20	30.30	
R10	-	0.20		
R11	0.10	0.20	0.20	
R17	0.10	0.20	0.30	
R18	0.20	0.40	0.60	
R19	0.05		0.20	
R20	/4\	-	0.15	

## Notes:

- 1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M - 1994.
- 2. DIMENSIONS ARE IN MILLIMETERS.
- COPLANARITY IS ADDITIVE TO C1 MAX THICKNESS.
- AALL EDGES SHALL NOT BE SHARP AS TESTED PER UL1439 "Test for Sharpness of Edges on Equipment."
- Refer to Appendix E about test method of warpage.

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