

ZMCMT8100, ZMCMT8101

ZMCMT8100, ZMCMT8101 High Reliability Bidirectional I2C Isolators

Features

- Up to 5000 Vrms insulation voltage
- I2C Clock rate: up to 2 MHz
- Power supply voltage: 2.5 V to 5.5 V
- AEC-Q100 Grade 1 qualified
- High CMTI: 150 kV/us
- Chip level ESD: HBM: ± 8 kV
- High system level EMC performance:
 - Enhanced system level ESD, EFT, surge immunity
- Isolation barrier life: > 60 years
- Low power consumption: 1.5mA/ch (1 Mbps)
- Low propagation delay: <15 ns
- Operation temperature: -40°C~125°C
- RoHS-compliant packages:
 - SOIC-8 narrow body
 - SOIC-16 wide body
 - SOW-8 wide body

- Safety regulatory approvals
 - UL recognition: up to 5000 Vrms for 1 minute per UL1577
 - CQC certification per GB4943.1-2011
 - CSA component notice 5A
 - DIN VDE V 0884-11:2017-01

Applications

- Power over Ethernet
- Isolated I2C, SMBus, or PMBus interface
- I2C level shifting
- Battery management

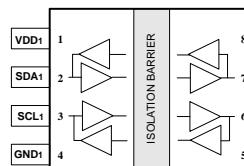
Description

The (ZMCMT8100, ZMCMT8101) devices are high reliability bidirectional isolators that are compatible with I2C interface. The ZMCMT810X devices are AEC-Q100 qualified. The ZMCMT810X devices are safety certified by UL1577 supporting several insulation withstand voltages (3.75 kVrms, 5 kVrms), while providing high electromagnetic immunity and low emissions at low power consumption. The I2C clock of the ZMCMT810X is up to 2 MHz, and the common-mode transient immunity (CMTI) is up to 150 kV/us. Wide supply voltage of the ZMCMT810X devices supports to connect with most digital interfaces directly, easy to do the level shift. High system level EMC performance enhances device reliability and stability.

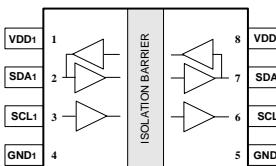
Device Information

Part No.	Package	Body Size (mm x mm)
ZMCMT810X	NB(N) SOIC-8	5.0 x 4.0
	WB(W) SOW-8	5.85 x 7.5
	WB(W) SOIC-16	10.4 x 7.5

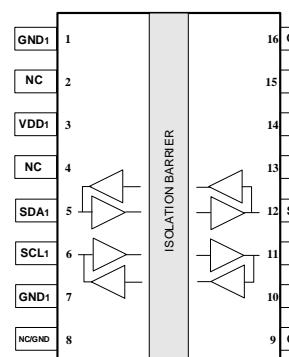
Refer to section 8 for ordering information.



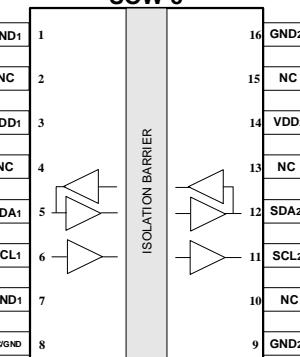
**ZMCMT8100 NB SOIC-8/
WB SOW-8**



**ZMCMT8101 NB
SOIC-8/WB**



ZMCMT8100 WB SOIC-16



ZMCMT8101 WB SOIC-16

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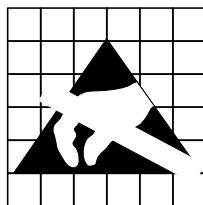
1 Absolute Maximum Ratings

Table 1. Absolute Maximum Ratings^[1]

Parameters	Symbol	Condition	Min.	Typ	Max	Unit
Power supply voltage	VDD1, VDD2		-0.5		6.5	V
Maximum input voltage	SDA1, SDA2, SCL1, SCL2		-0.4		VDD+0.4 ^[1]	V
Maximum input pulse voltage	SDA1, SDA2, SCL1, SCL2	Pulse width should be less than 100 ns, and the duty cycle should be less than 10%	-0.8		VDD+0.8	V
Common-Mode transients	CMTI				±150	kV/us
Output current	Io		-15		15	mA
Maximum surge isolation voltage	VIOSM				5.3	kV
Operating temperature	Topr		-40		125	°C
Storage temperature	Tstg		-40		150	°C
Electrostatic discharge	HBM				±8000	V
	CDM				±2000	V

Notes:

[1]. The maximum voltage must not exceed 6.5 V.



Caution! ESD sensitive device. Precaution should be used when handling the device in order to prevent performance degradation or loss of functionality.

2 Pin Description

Narrow-body (N) 8-pin and wide-body (W) 16-pin SOIC / wide-body(W) 8-pin SOW packages are available for the series part number of ZMCMT8100x, ZMCMT8101x. The pin lists are shown as follows.

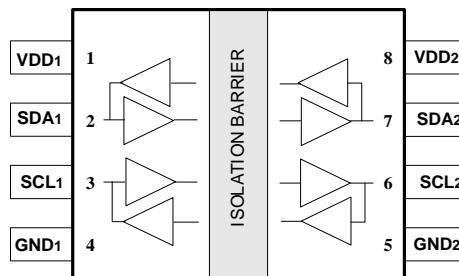


Figure 1. ZMCMT8100N Pin List of SOIC-8 NB/
SOW-8 WB

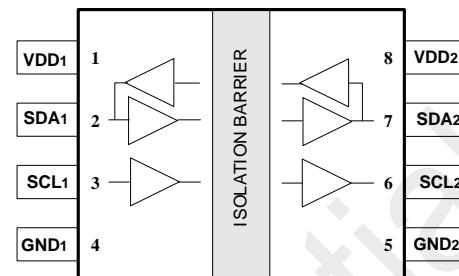


Figure 2. ZMCMT8101N Pin List of SOIC-8 NB/
SOW-8 WB

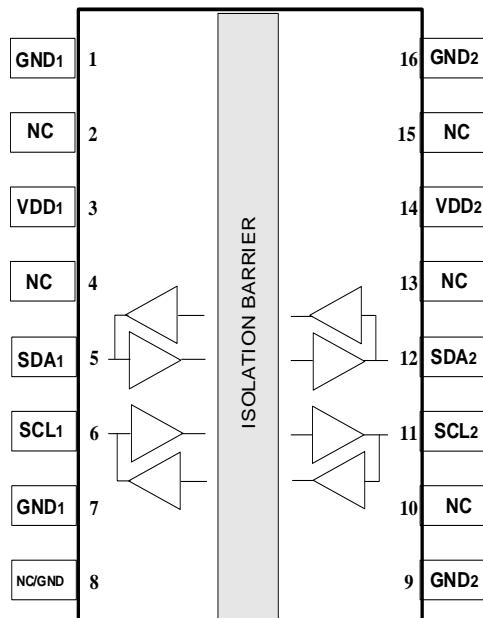


Figure 3 ZMCMT8100W SOIC-16 Pin List

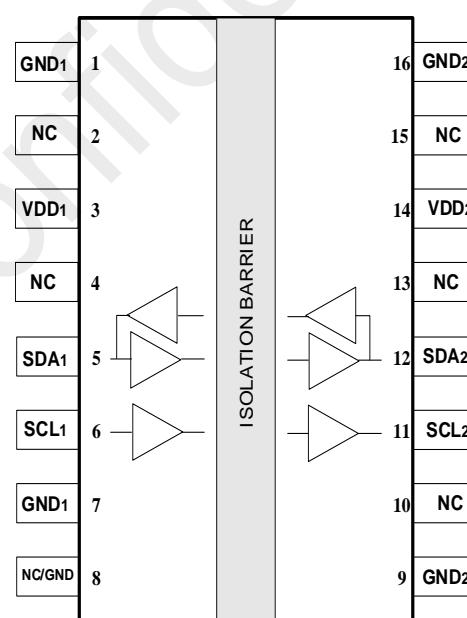


Figure 4. ZMCMT8101W SOIC-16 Pin List

Table 2. ZMCMT8100N/8101N Pin Description

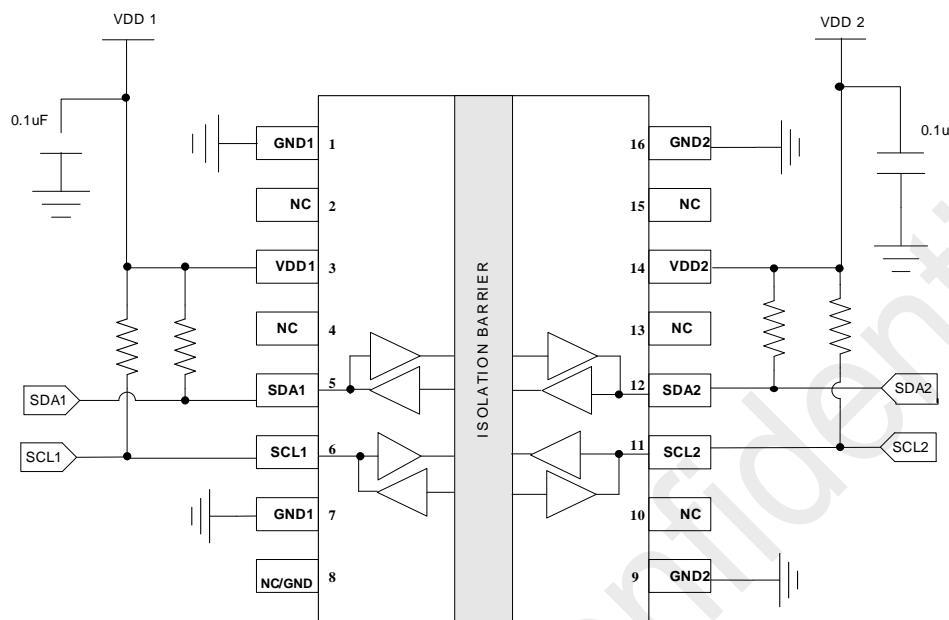
Pin #	Pin Name	I/O	Description
1	VDD ₁	-	Power supply for isolator side 1.
2	SDA ₁	I/O	Serial data input /output, side 1
3	SCL ₁	I/O	Serial clock input /output, side 1.
4	GND ₁	-	The ground reference for isolator side 1.
5	GND ₂	-	The ground reference for isolator side 2.
6	SCL ₂	I/O	Serial clock input /output, side 2.
7	SDA ₂	I/O	Serial data input /output, side 2
8	VDD ₂	-	Power supply for isolator side 2.

Table 3 ZMCMT8100W/8101W Pin Description

Pin #	Pin Name	I/O	Description
1	GND ₁	-	Ground 1, the ground reference for Isolator Side 1
2	NC	-	No Connection.
3	VDD1	-	Power Supply for Isolator Side 1.
4	NC	-	No Connection.
5	SDA ₁	I/O	Serial data input /output, Side 1.
6	SCL ₁	I/O	Serial clock input /output, Side 1.
7	GND ₁	I/O	Ground 1, the ground reference for Isolator Side 1.
8	NC/GND	-	No Connection/ Connect to the Ground.
9	GND ₂	-	Ground 2, the ground reference for Isolator Side 2.
10	NC	-	No Connection.
11	SCL ₂	I/O	Serial clock input /output, Side 2.
12	SDA ₂	I/O	Serial data input /output, Side 2.
13	NC	-	No Connection.
14	VDD ₂	-	Power Supply for Isolator Side 2.
15	NC	-	No Connection.
16	GND ₂	-	Ground 2, the ground reference for Isolator Side 2.

3 Typical Application

3.1 Typical Application Schematic



3.2 PCB Layout Guidelines

The ZMCMT8100X requires a 0.1 μ F bypass capacitor between VDD1 and GND1, VDD2 and GND2. The capacitor should be placed as close as possible to the package. The figure below shows the recommended PCB layout. Make sure the space under the chip should keep free from planes, traces, pads and via. The pull-up resistors are required for both side 1 and side 2 buses. And the value of the resistors depends on the number of I²C devices on the bus.

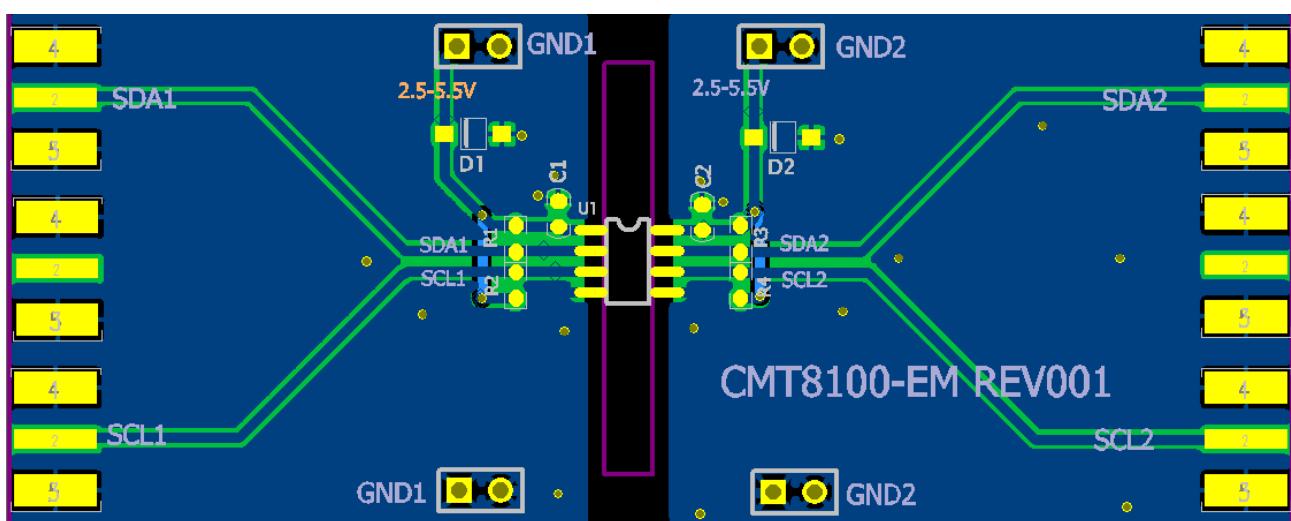


Figure 5. Recommended PCB Layout

4 Specifications

VDD1 = 2.5 ~ 5.5 V, VDD2 = 2.5 ~ 5.5 V, Ta = -40°C to 125°C. Unless otherwise noted, typical values are at VDD1 = 5 V, VDD2 = 5 V, Ta = 25°C.

4.1 Electrical Characteristics

Table 4. Electrical Characteristics

Parameters	Symbol	Condition	Min	Typ	Max	Unit
Power on reset	VDD _{POR}	POR threshold as during power-up		2.2		V
	VDD _{HYS}	POR threshold Hysteresis		0.1		V
Start up time after POR	t _{rps}			10		usec
Common mode transient immunity	CMTI		±100		±150	kV/us
Side 1 logic level						
Input threshold	V _{ILT1}	Input threshold at rising edge	400			mV
	V _{IHT1}				600	mV
	V _{IT_HYS1}	Input threshold hysteresis		100		mV
Low level output voltage	V _{OL1}	I _{OL} ≤ 4mA, R _{PULL UP} =1K	650		800	mV
Low-level output voltage to high-level input voltage threshold difference	ΔV _{OIT1}		70			mV
Side 2 Logic Level						
Input threshold	V _{ILT2}	Input threshold at rising edge		1.6		V
	V _{IT_HYS2}	Input threshold hysteresis		0.4		V
High level input voltage	V _{IH2}		2.0			V
Low level input voltage	V _{IL2}				0.8	V
Low level output voltage	V _{OL}	I _{OL} ≤ 30mA			0.5	V

4.2 Supply Current Characteristics with 5 V Supply

VDD1 = 5 V ± 10%, VDD2 = 5 V ± 10%, Ta = -40 °C to 125 °C. Unless otherwise noted, Typical values are at VDD1 = 5 V, VDD2 = 5 V, Ta = 25 °C.

Table 5. Supply Current Characteristics with 5 V Supply

Parameter	Symbol	Condition	Min.	Typ.	Unit
ZMCMT8100					
Supply current All Input 0 V	I _{DD1} (Q0)			4.89	mA
	I _{DD2} (Q0)			3.99	mA

Parameter	Symbol	Condition	Min.	Typ.	Unit
Supply current: All Input at supply	$I_{DD1}(Q1)$			2.56	mA
	$I_{DD2}(Q1)$			1.97	mA
Supply current: All Input with 2MHz, $C_L=15pF$	$I_{DD1}(2M)$			3.72	mA
	$I_{DD2}(2M)$			2.64	mA
ZMCMT8101					
Supply current All Input 0V	I_{DD1}			4.19	mA
	I_{DD2}			2.94	mA
Supply current: All Input at supply,	I_{DD1}			1.97	mA
	I_{DD2}			1.92	mA
Supply current: All Input with 2MHz, $C_L=15pF$	I_{DD1}			2.63	mA
	I_{DD2}			2.37	mA
Clock rate	DR		0	2	MHz
Propagation delay	t_{PLH12}	See figure .6, $R1=1500 \Omega$, $R2= 500\Omega$, no load		46.66	ns
	t_{PHL12}	See figure .6, $R1=1500 \Omega$, $R2= 500\Omega$, no load		66.66	ns
	t_{PLH21}	See figure .6, $R1=1500 \Omega$, $R2= 500\Omega$, no load		38.34	ns
	t_{PHL21}	See figure .6, $R1=1500 \Omega$, $R2= 500\Omega$, no load		72.34	ns
Pulse width distortion	PWD_{12}	$ t_{PHL12} - t_{PLH12} $		34	ns
	PWD_{21}	$ t_{PHL21} - t_{PLH21} $		20	ns
Falling time	t_{f1}	$C_L = 30pF$		17.1	ns
	t_{f2}	$C_L = 300pF$		26.2	ns

4.3 Supply Current Characteristics with 3.3 V Supply

VDD1 = 3.3 V \pm 10%, VDD2 = 5 V \pm 10%, Ta = -40 °C to 125 °C. Unless otherwise noted, Typical values are at VDD1 = 3.3 V, VDD2 = 3.3 V, Ta = 25 °C.

Table 6. Supply Current Characteristics with 3.3 V Supply

Parameter	Symbol	Condition	Min.	Typ.	Unit
ZMCMT8100					
Supply current All Input 0V	$I_{DD1}(Q0)$			4.87	mA
	$I_{DD2}(Q0)$			3.98	mA
Supply current: All Input at supply,	$I_{DD1}(Q1)$			2.53	mA
	$I_{DD2}(Q1)$			1.95	mA
Supply current: All Input with 2MHz, $C_L=15pF$	$I_{DD1}(2M)$			3.51	mA
	$I_{DD2}(2M)$			2.78	mA

Parameter	Symbol	Condition	Min.	Typ.	Unit
ZMCMT8101					
Supply current All Input 0V	I_{DD1}			4.17	mA
	I_{DD2}			2.93	mA
Supply current: All Input at supply,	I_{DD1}			1.94	mA
	I_{DD2}			1.89	mA
Supply current: All Input with 2MHz, $C_L=15pF$	I_{DD1}			2.73	mA
	I_{DD2}			2.29	mA
Clock rate	DR		0	2	MHz
Propagation delay	t_{PLH12}	See figure 6, $R1=1500 \Omega$, $R2= 500\Omega$, no load		46.66	ns
	t_{PHL12}	See figure 6, $R1=1500 \Omega$, $R2= 500\Omega$, no load		66.66	ns
	t_{PLH21}	See figure 6, $R1=1500 \Omega$, $R2= 500\Omega$, no load		38.34	ns
	t_{PHL21}	See figure 6, $R1=1500 \Omega$, $R2= 500\Omega$, no load		72.34	ns
Pulse width distortion	PWD_{12}	$ t_{PHL12} - t_{PLH12} $		34	ns
	PWD_{21}	$ t_{PHL21} - t_{PLH21} $		20	ns
Falling time	t_f1	$CL = 30pF$		17.1	ns
	t_f2	$CL = 300pF$		26.2	ns

4.4 Supply Current Characteristics with 2.5 V Supply

VDD1 = 2.5 V \pm 10%, VDD2 = 2.5 \pm 10%, Ta = -40 °C to 125 °C. Unless otherwise noted, Typical values are at VDD1 = 2.5 V, VDD2 = 2.5 V, Ta = 25 °C.

Table 7. Supply Current Characteristics with 2.5 V Supply

Parameter	Symbol	Condition	Min.	Typ.	Unit
ZMCMT8100					
Supply current All Input 0V	$I_{DD1}(Q0)$			4.85	mA
	$I_{DD2}(Q0)$			3.96	mA
Supply current: All Input at supply,	$I_{DD1}(Q1)$			2.53	mA
	$I_{DD2}(Q1)$			1.94	mA
Supply current: All Input with 2MHz, $C_L=15pF$	$I_{DD1}(2M)$			3.43	mA
	$I_{DD2}(2M)$			2.85	mA
ZMCMT8101					
Supply current All Input 0V	I_{DD1}			4.15	mA
	I_{DD2}			2.91	mA
Supply current:	I_{DD1}			1.97	mA

Parameter	Symbol	Condition	Min.	Typ.	Unit
All Input at supply,	I_{DD2}			1.91	mA
Supply current: All Input with 2MHz, $C_L=15\text{pF}$	I_{DD1}			2.8	mA
	I_{DD2}			2.25	mA
Clock rate	DR		0	2	MHz
Propagation delay	t_{PLH12}	See figure 6, $R_1=1500\Omega$, $R_2=500\Omega$, no load		47.5	ns
	t_{PHL12}	See figure .6, $R_1=1500\Omega$, $R_2=500\Omega$, no load		89.5	ns
	t_{PLH21}	See figure .6, $R_1=1500\Omega$, $R_2=500\Omega$, no load		40.84	ns
	t_{PHL21}	See figure .6, $R_1=1500\Omega$, $R_2=500\Omega$, no load		96.64	ns
Pulse width distortion	PWD_{12}	$ t_{PHL12} - t_{PLH12} $		42	ns
	PWD_{21}	$ t_{PHL21} - t_{PLH21} $		55.8	ns
Falling time	t_{f1}	$C_L = 30\text{pF}$		31	ns
	t_{f2}	$C_L = 300\text{pF}$		42	ns

4.5 Parameter Measurement Circuit Setup

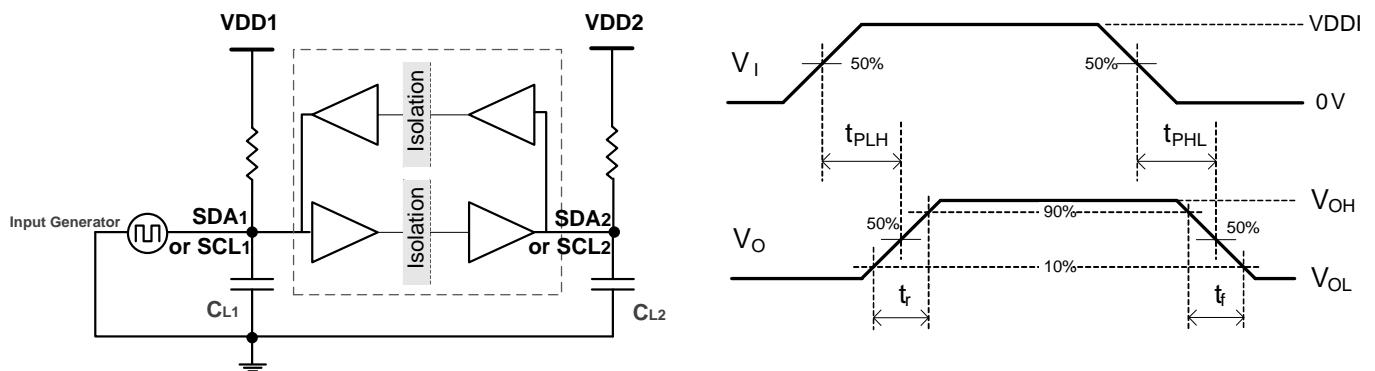


Figure 6. Switching Characteristic Test Circuit and Voltage Waveforms

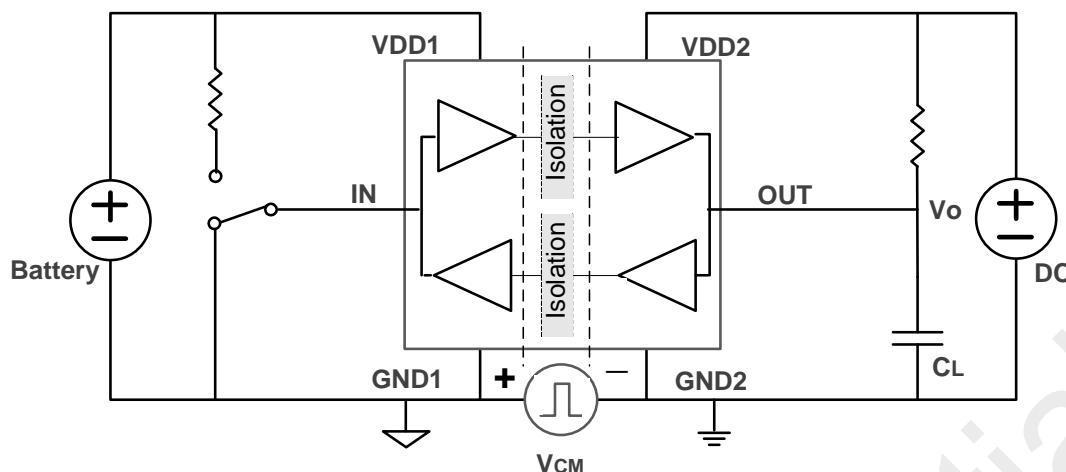


Figure 7. Common-Mode Transient Immunity Test Circuit

5 High Voltage Feature Specifications

5.1 Insulation and Safety Related Specifications

Table 8. Insulation and Safety Related Specifications

Parameter	Symbol	Condition	Value		Unit
			SOIC-8	SOW-8/SOIC-16	
Minimum External Air Gap (Clearance)	L(I01)	Shortest terminal-to-terminal distance through air	4.0	8.0	mm
Minimum External Tracking (Creepage)	L(I02)	Shortest terminal-to-terminal distance across the package surface	4.0	8.0	mm
Minimum internal gap	DTI	Distance through insulation	25		um
Tracking Resistance (Comparative Tracking Index)	CTI	DIN EN 60112 (VDE 0303-11); IEC 60112	>400		V
Material Group			1		

5.2 DIN VDE V 0884-11(VDE V 0884-11):2017-01 Insulation Characteristics

Table 9. DIN VDE V 0884-11(VDE V 0884-11):2017-01 Insulation Characteristics

Description	Symbol	Test Condition	Value		Unit
			SOIC-8	SOW-8/SOIC-16	
Installation classification per DIN VDE 0110					
For rated mains voltage \leq 150 Vrms			I to IV	I to IV	
For rated mains voltage \leq 300 Vrms			I to III	I to IV	
For rated mains voltage \leq 400 Vrms			I to III	I to IV	
Climatic classification			10/105/21	10/105/21	

Pollution degree per DIN VDE 0110, table 1			2	2	
Maximum repetitive isolation voltage	V_{IORM}		565	849	V_{peak}
Input to output test voltage, method B1	$V_{pd(m)}$	$V_{IORM} \times 1.5 = V_{pd(m)}$, 100% production test, $t_{ini} = t_m = 1$ sec, partial discharge < 5 pC	847	1273	V_{peak}
Input to output test voltage, method A					
After environmental tests subgroup 1	$V_{pd(m)}$	$V_{IORM} \times 1.2 = V_{pd(m)}$, $t_{ini} = 60$ sec, $t_m = 10$ sec, partial discharge < 5 pC	678	1019	V_{peak}
After Input and /or safety test subgroup 2 and subgroup 3	$V_{pd(m)}$	$V_{IORM} \times 1.2 = V_{pd(m)}$, $t_{ini} = 60$ sec, $t_m = 10$ sec, partial discharge < 5 pC	678	1019	V_{peak}
Maximum transient isolation voltage	V_{IOTM}	$t = 60$ sec	5300	7000	V_{peak}
Maximum surge isolation voltage	V_{IOSM}	Test method per IEC 60065, 1.2/50us waveform, $V_{TEST}=1.3 \times V_{IOSM}$	5300	7000	V_{peak}
Isolation resistance	R_{IO}	$V_{IO} = 500V$	$>10^9$	$>10^9$	Ω

UL1577

Isolation withstand voltage	V_{ISO}	$V_{TEST} = V_{ISO}$, $t = 60$ s (certified); $V_{TEST} = 1.2 \times V_{ISO}$, $t = 1$ s (100% mass production)	3750	5000	V_{rms}
Isolation capacitance	C_{IO}	$f = 1MHz$	0.6	0.6	pF
Input capacitance	C_I		2	2	pF
Total power dissipation at 25°C	P_s			1499	mW
Case temperature	T_s		150	150	°C

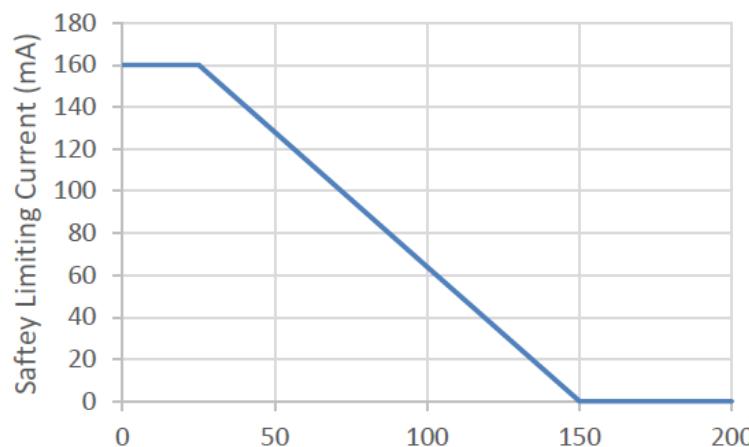


Figure 8. ZMCMT8100N/8101N Thermal Derating Curve, Dependence of Safety Limiting Values with Case Temperature per DIN V 0884-11

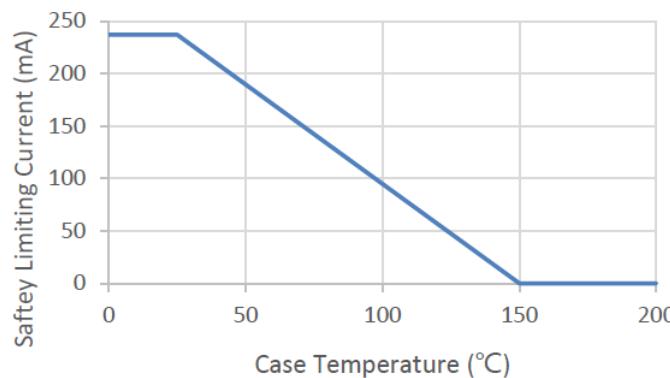


Figure 9. ZMCMT8100W/8101W Thermal Derating Curve, Dependence of Safety Limiting Values with Case Temperature per DIN VDE V 0884-11

5.3 Regulation Information

The ZMCMT8100N/ZMCMT8101N are approved by the organizations listed in table below.

Table 10. ZMCMT8100N / ZMCMT8101N Regulation

UL Conformation	VDE	CQC
UL 1577 Component Recognition Program	Approved under CSA Component Acceptance Notice 5A	DIN VDE V 0884- 11(VDE V 0884-11):2017-01 ^[2] (Applying) Certified by CQC11- 471543-2012 GB4943.1-2011
Certificate number: UL-US-2439077-1	Certificate number: UL-CA-2429797-0	File (pending) File: CQC23001382478

The ZMCMT8100W/CMT8101W are approved by the organizations listed in table below.

Table 11. ZMCMT8100W / ZMCMT8101W Regulation Conformation

UL	VDE	CQC
UL 1577 Component Recognition Program	Approved under CSA Component Acceptance Notice 5A	DIN VDE V 0884- 11(VDE V 0884-11):2017-012 (Applying) Certified by CQC11- 471543-2012 GB4943.1-2011
Certificate number: UL-US-2439077-1	Certificate number: UL-CA-2429797-0	File (pending) File: CQC23001385762

6 Function Description

6.1 Function Overview

The ZMCMT810X is a bidirectional isolator based on a capacitive isolation barrier technique. The ZMCMT810X devices are compatible with I2C interface. Internally, the I2C interface is split into two unidirectional channels communicating in opposite directions via a dedicate capacitive isolation channel for each. The digital signal is modulated with RF carrier generated by the internal oscillator at the Transmitter side. Then it is transferred through the capacitive isolation barrier and demodulated at the Receiver side.

The ZMCMT8100 devices are high reliability dual-channel bidirectional isolators for clock and data lines while ZMCMT8101 has a

bidirectional data and a unidirectional clock channel. The ZMCMT8100 is suitable for multi-master application while ZMCMT8101 is useful in a single master application.

The side 2 logic levels of ZMCMT810X are standard I₂C value, and the maximum load for side 2 is ≤ 400 pF. So multiple ZMCMT810X devices connected to a bus by their Side 2 pins can communicate with each other and with other I₂C compatible devices.

The side 1 logic levels of ZMCMT810X are not standard value. The output low level of ZMCMT810X is 650mV, while low-level output voltage to high-level input voltage threshold is 50 mV. This prevents an output logic low at Side 1 being transmitted back to Side 2 and pulling down the I₂C bus.

The ZMCMT810X devices are AEC-Q100 qualified. The CMT810X device is safety certified by UL1577 support several insulation withstand voltages (3.75 kVrms, 5 kVrms), while providing high electromagnetic immunity and low emissions at low power consumption. The I₂C clock of the CMT810X is up to 2 MHz, and the common-mode transient immunity (CMTI) is up to 150 kV/us. Wide supply voltage of the CMT810X device supports to connect with most digital interfaces directly, easy to do the level shift. High system level EMC performance enhances reliability and stability.

The table below shows the functional status of CMT810X. The ZMCMT810X is high impedance output when VDDIN is unready and VDDOUT is ready as shown in the table below.

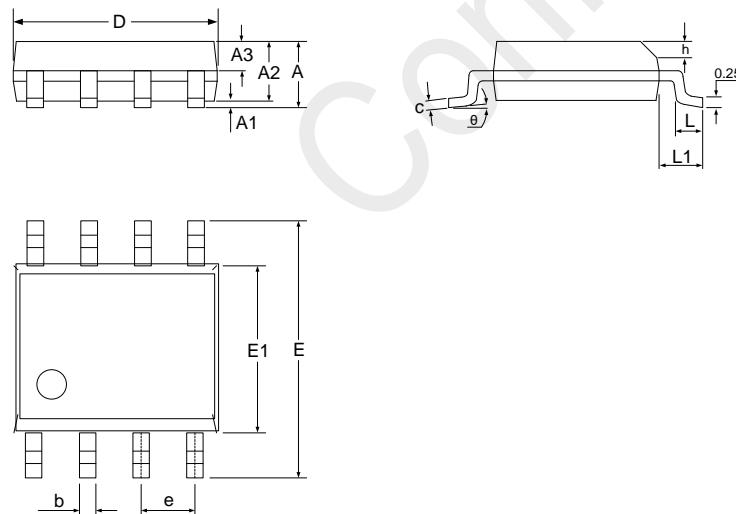
Table 12. Output Status vs. Power Status

Input	VDD1 Status	VDD2 Status	Output	Comment
H	Ready	Ready	Z	Normal operation.
L	Ready	Ready	L	
X	Unready	Ready	Z	The output follows the same status with the input within 60 us after input side VDD1 is powered on.
X	Ready	Unready	X	The output follows the same status with the input within 60 us after output side VDD2 is powered on.

7 Packaging Information

The packaging information of the CMT810X is shown in the figures below.

7.1 ZMCMT8100N/ZMCMT8101N Narrow Body SOIC-8 Package


Figure 10. Narrow Body SOIC-8 Packaging
Table 13. Narrow Body SOIC-8 Packaging Scale

Symbol	Size (mm)		
	Min	Typ	Max
A	-	-	1.75
A1	0.10	0.18	0.25
A2	1.30	1.40	1.50
A3	0.60	0.65	0.70
b	0.33	0.42	0.51
c	0.17	0.21	0.25
D	4.80	5.00	5.20
E	5.80	6.00	6.20

Symbol	Size (mm)		
	Min	Typ	Max
E1	3.90	4.00	4.10
e	1.27 BSC		
h	0.25	-	0.50
L	0.40	0.60	0.80
L1	1.05 BSC		
θ	0	-	8°

7.2 ZMCMT8100W/ZMCMT8101W Wide Body SOIC-16 Package

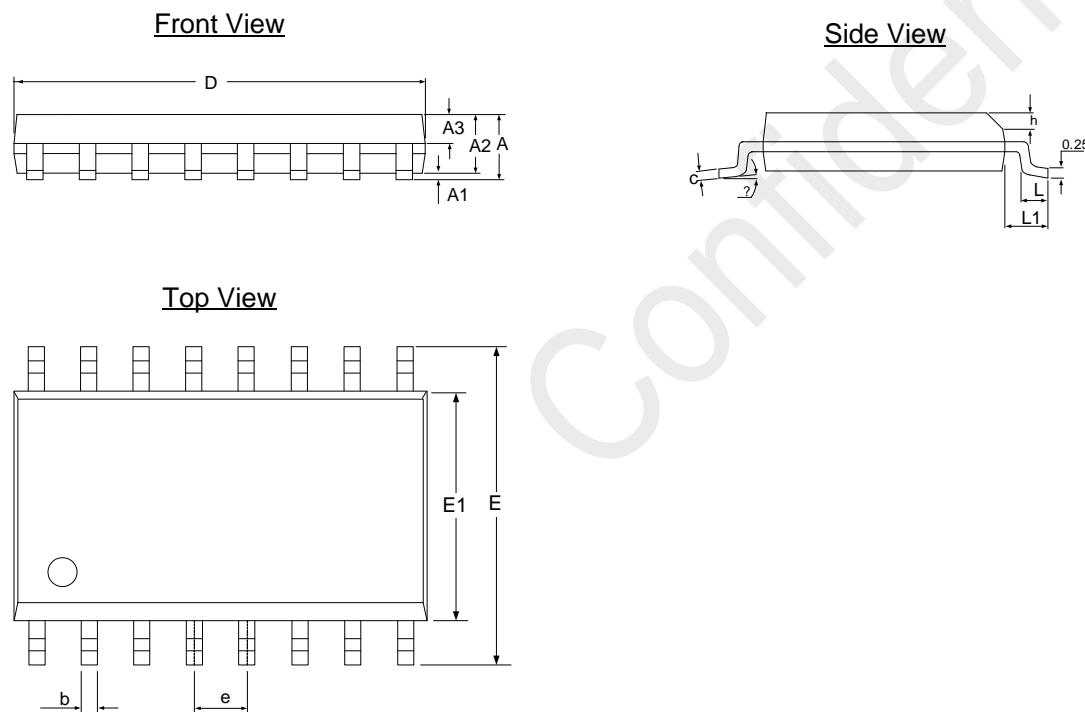


Figure 11. Wide Body SOIC-16 Packaging

Table 14. Wide Body SOIC-16 Packaging Scale

Symbol	Scale (mm)		
	Min.	Typ.	Max.
A	-	-	2.65
A1	0.10	0.20	0.30
A2	2.25	2.30	2.35
A3	1.00	1.05	1.10
b	0.35	0.37	0.43
c	0.15	0.20	0.30
D	10.30	10.40	10.50
E	10.10	10.30	10.50

Symbol	Scale (mm)		
	Min.	Typ.	Max.
E1	7.40	7.50	7.60
e	1.14	1.27	1.40
L	0.65	0.70	0.85
L1		1.40	
θ	0	-	8°

7.3 ZMCMT8100WH/ZMCMT8101WH SOW-8 Package

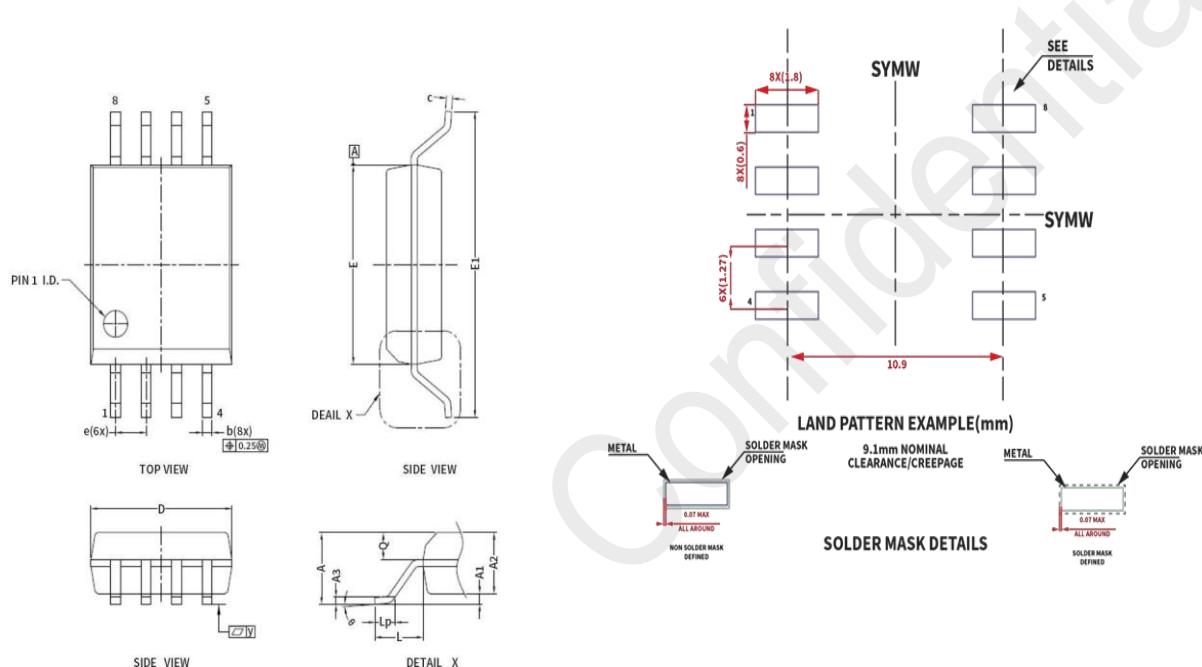


Figure 12. ZMCMT810X SOW-8 WB Packaging

Table 15. ZMCMT810X SOW-8 WB Packaging Scale

Symbol	Scale (mm)		
	Min.	Typ.	Max.
A	-	-	2.80
A1	0.36	-	0.46
A2	2.20	2.30	2.40
A3	-	0.25	-
Q	0.97	1.02	1.07
b	0.31	0.41	0.51
c	0.13	-	0.33
D	5.75	5.85	5.95
E	7.40	7.50	7.60
E1	11.25	11.50	11.75
e		1.27 bsc	

Symbol	Scale (mm)		
	Min.	Typ.	Max.
L	2.00 bsc		
L _p	0.50	-	1.00
Y	-	0.10	-
θ	0	-	8°

8 Ordering Information

Table 16. Part Number Information List

Part No.	Isolation Rating(kV)	MOQ	Numbers of input channel	Max Clock Rate (MHz)	Temperature	Automotive	Package	MSL
ZMCMT8100N	3.75	3000	2	2	-40 to 125°C	NO	NB SOIC8	1
ZMCMT8101N	3.75	3000	2	2	-40 to 125°C	NO	NB SOIC8	1
ZMCMT8100WH	5	1000	2	2	-40 to 125°C	NO	WB SOW8	3
ZMCMT8101WH	5	1000	2	2	-40 to 125°C	NO	WB SOW8	3
ZMCMT8100W	5	1000	2	2	-40 to 125°C	NO	WB SOIC16	3
ZMCMT8101W	5	1000	2	2	-40 to 125°C	NO	WB SOIC16	3

Part Number Naming Rule:

ZMCMT 8 1 0 1 N (Q)

Series Number

Q = Automotivegrade

Totalc hannels a mount, options are
1, 2, 4 ...;
0: means I2C Part

0: Bidirectional for both data and clock
1: Bidirectional data and unidirectional clock

Package type:
N = NB SOIC
W = WB SOIC

9 Tape and Reel Information

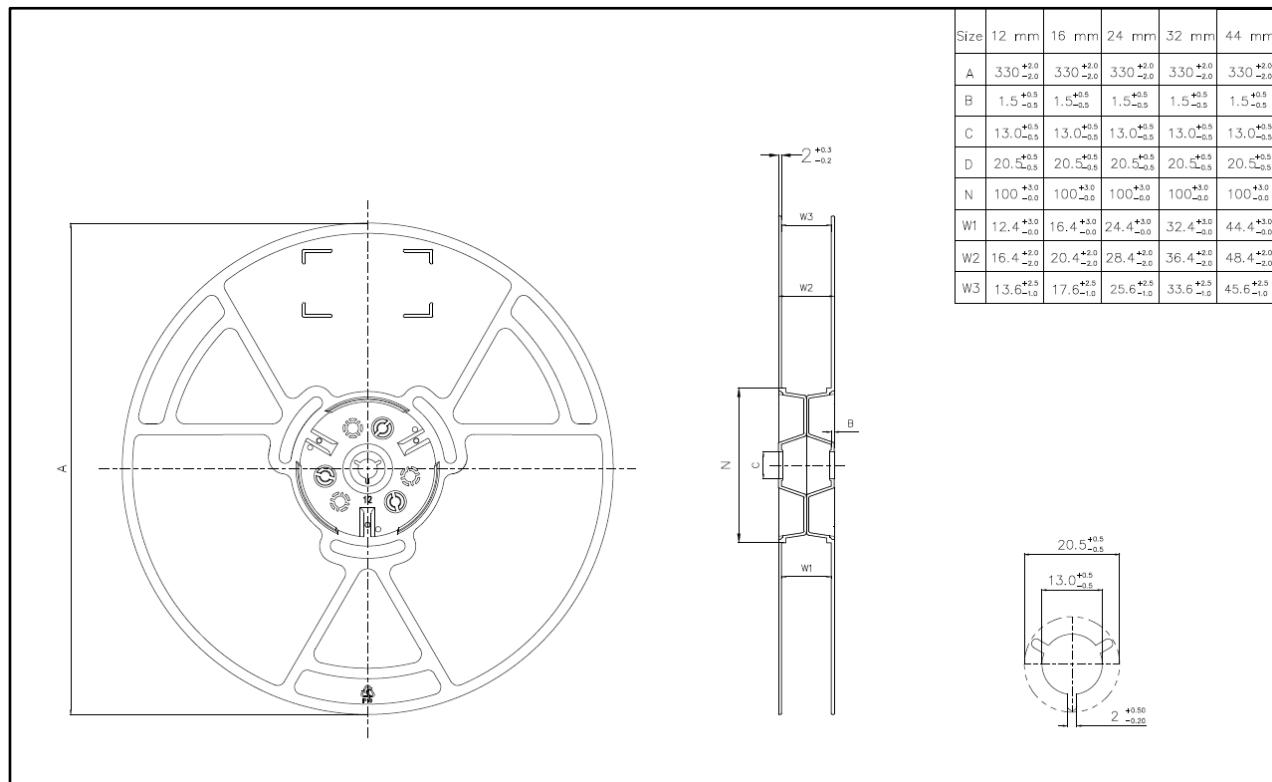


Figure 13. ZMCMT810X WB SOIC-16 Tape and Reel Information

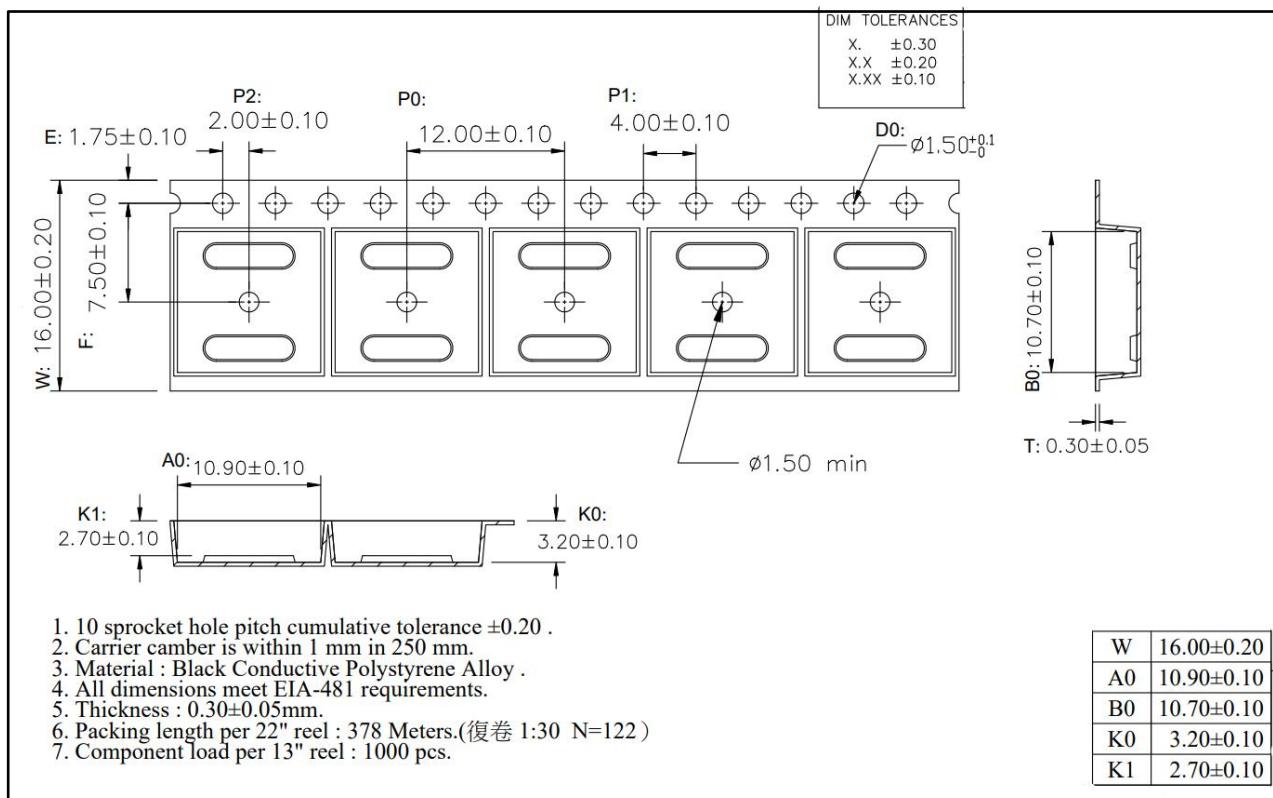


Figure 14. ZMCMT810X WB SOIC-16 Tape and Reel Information

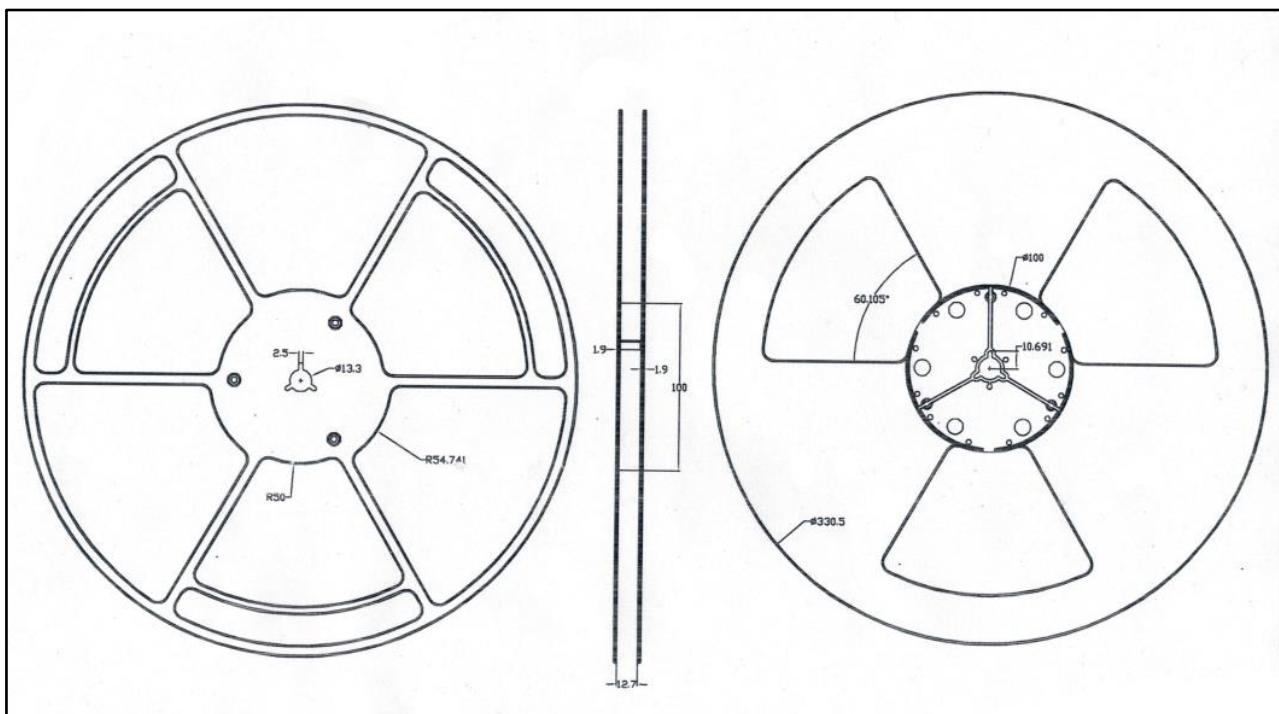


Figure 15. ZMCMT810X NB SOIC-8 Tape and Reel Information

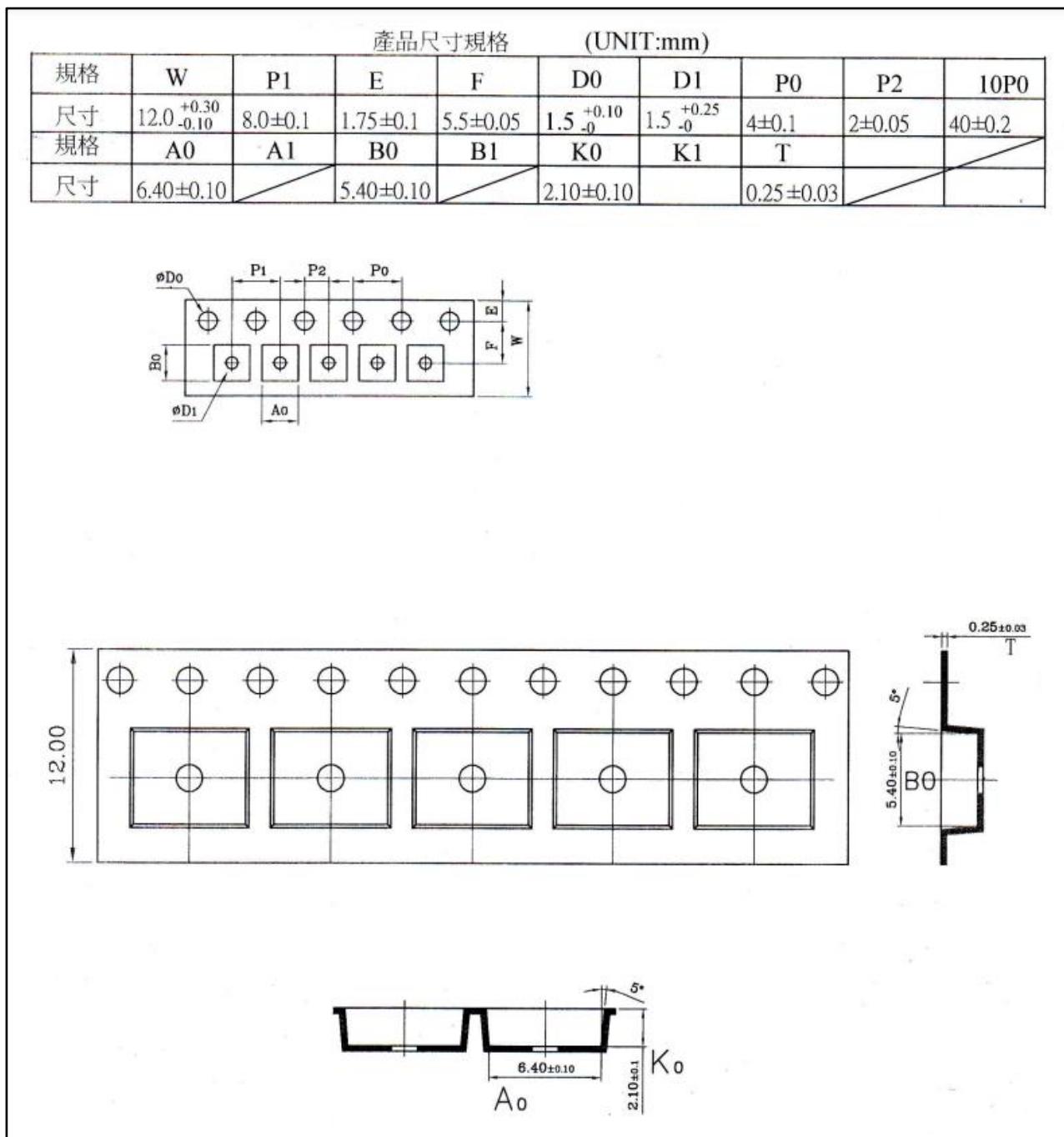


Figure 16. ZMCMT810X NB SOIC-8 Tape and Reel Information