

**UMMSZ52XXB**

Preliminary

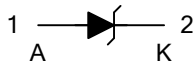
ZENER DIODE**SURFACE MOUNT SILICON
ZENER DIODE****DESCRIPTION**

The UTC **UMMSZ52XXB** is a surface mount silicon zener diode, it uses UTC's advanced technology to provide customers with low reverse leakage current, etc.

The UTC **UMMSZ52XXB** is suitable for automated assembly processes.

FEATURES

* Low reverse leakage current

SYMBOL**ORDERING INFORMATION**

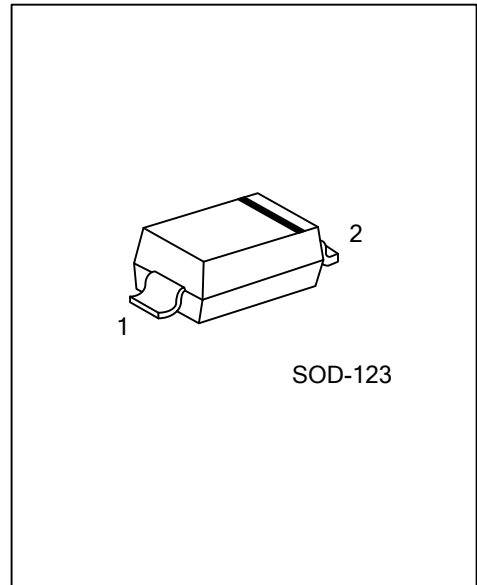
Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
UMMSZ52XXBL-CA2-R	UMMSZ52XXBG-CA2-R	SOD-123	A	K	Tape Reel

Note: Pin Assignment: A: Anode, K: Cathode

UMMSZ52XXBL-CA2-R		(1) Packing Type	(1) R: Tape Reel
		(2) Package Type	(2) CA2 : SOD-123
		(3) Lead Free	(3) L: Lead Free, G: Halogen Free
		(4) Output Voltage	(4) 28: 3.9V, 31: 5.1V, 34: 6.2V, 48: 18V, 50: 20V

MARKING INFORMATION

PACKAGE	VOLTAGE CODE	MARKING
SOD-123	3.9: 3.9V 5.1: 5.1V 6.2: 6.2V 18: 18V 20: 20V	 Voltage Code ← L: Lead Free G: Halogen Free



SOD-123

■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Zener Current	I_{ZM}	115	mA
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (Note 2)	I_{FSM}	4.0	A
Power Dissipation at 75°C (Note 1)	P_D	500	mW
Operating Junction Temperature	T_J	-55~+150	°C

Note: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

2. Mounted on 5.0mm² (.013mm thick) land areas.

3. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum.

■ ELECTRICAL CHARACTERISTICS

For UMMSZ5228B

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Zener Voltage	V_Z	$I_{ZT}=20mA$	3.71	3.9	4.1	V
Zener Impedance	Z_{ZT}	$I_{ZT}=20mA$			23	Ω
	Z_{ZK}	$I_{ZK}=0.25mA$			1900	Ω
Reverse Leakage Current	I_R	$V_R=1.0V$			10	μA

For UMMSZ5231B

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Nominal Zener Volage	V_Z	$I_{ZT}=20mA$	4.85	5.1	5.36	V
Zener Impedance	Z_{ZT}	$I_{ZT}=20mA$			17	Ω
	Z_{ZK}	$I_{ZK}=0.25mA$			1600	Ω
Reverse Leakage Current	I_R	$V_R=2V$			5	μA

For UMMSZ5234B

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Nominal Zener Volage	V_Z	$I_{ZT}=20mA$	5.89	6.2	6.51	V
Zener Impedance	Z_{ZT}	$I_{ZT}=20mA$			7	Ω
	Z_{ZK}	$I_{ZK}=0.25mA$			1000	Ω
Reverse Leakage Current	I_R	$V_R=4V$			5	μA

For UMMSZ5248B

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Nominal Zener Volage	V_Z	$I_{ZT}=7mA$	17.1	18	18.9	V
Zener Impedance	Z_{ZT}	$I_{ZT}=7mA$			21	Ω
	Z_{ZK}	$I_{ZK}=0.25mA$			600	Ω
Reverse Leakage Current	I_R	$V_R=14V$			0.1	μA

For UMMSZ5250B

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Nominal Zener Volage	V_Z	$I_{ZT}=6.2mA$	19	20	21	V
Zener Impedance	Z_{ZT}	$I_{ZT}=6.2mA$			25	Ω
	Z_{ZK}	$I_{ZK}=0.25mA$			600	Ω
Reverse Leakage Current	I_R	$V_R=15V$			0.1	μA

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