



UMMSZ52XXA

Preliminary

DIODE

SURFACE MOUNT SILICON ZENER DIODE

DESCRIPTION

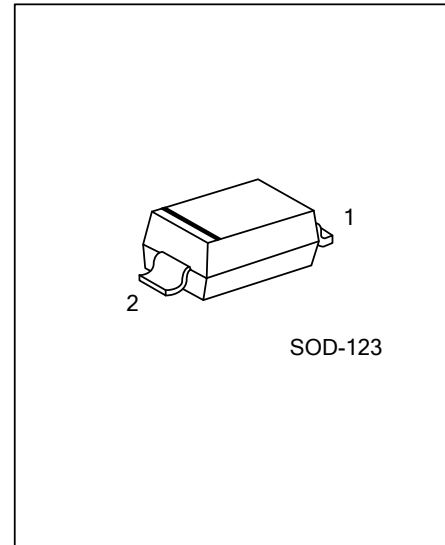
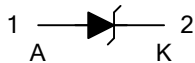
The UTC **UMMSZ52XXA** is a surface mount silicon zener diode, it uses UTC's advanced technology to provide customers with low reverse leakage current, etc.

The UTC **UMMSZ52XXA** is suitable for automated assembly processes.

FEATURES

* Low reverse leakage current

SYMBOL



SOD-123

ORDERING INFORMATION

Ordering Number	Package	Pin Assignment		Packing
		1	2	
UMMSZ52XXAG-CA2-R	SOD-123	A	K	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

UMMSZ52XXAG-CA2-R	(1) Packing Type (2) Package Type (3) Green Package (4) Output Voltage	(1) R: Tape Reel (2) CA2 : SOD-123 (3) G: Halogen Free and Lead Free (4) 28: 3.9V, 31: 5.1V, 34: 6.2V, 48: 18V, 50: 20V
-------------------	---	--

MARKING INFORMATION

PACKAGE	VOLTAGE CODE	MARKING
SOD-123	5.1: 5.1V 6.2: 6.2V 18: 18V 20: 20V	

■ 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	-50~+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 UMMSZ5231A

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Nominal Zener Volage	V_Z	$I_{ZT}=20mA$	5.0	5.1	5.2	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 UMMSZ5234A

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Nominal Zener Volage	V_Z	$I_{ZT}=20mA$	6.08	6.2	6.32	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 UMMSZ5248A

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Nominal Zener Volage	V_Z	$I_{ZT}=7mA$	17.64	18	18.36	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 UMMSZ5250A

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Nominal Zener Volage	V_Z	$I_{ZT}=6.2mA$	19.6	20	20.4	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

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.