



UMMSZ52XXA

Preliminary

DIODE

SURFACE MOUNT SILICON ZENER DIODE

DESCRIPTION

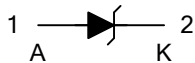
The UTC **UMMSZ52XXA** is a surface mount silicon zener diode, it uses UTC's advanced technology to provide customers with low reverse leakage current, etc.

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

FEATURES

* Low reverse leakage current

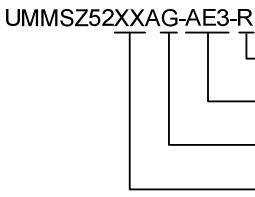
SYMBOL



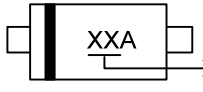
ORDERING INFORMATION

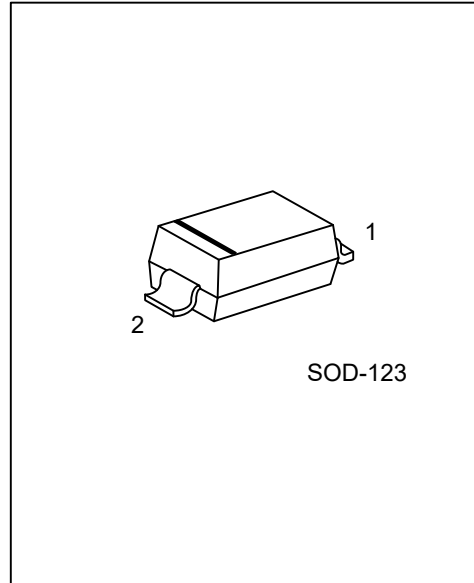
Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
UMMSZ52XXAL-CA2-R	UMMSZ52XXAG-CA2-R	SOD-123	A	K	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

	<p>(1) R: Tape Reel</p> <p>(2) CA2 : SOD-123</p> <p>(3) G: Halogen Free and Lead Free, L: Lead Free</p> <p>(4) XX: 31: 5.1V, 34: 6.2V... 50: 20V</p>
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MARKING INFORMATION

PACKAGE	VOLTAGE CODE	MARKING
SOD-123	L: 5.1V P: 6.2V 18: 18V 20: 20V	 Voltage Code



■ 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.

■ THERMAL DATA

PARAMETER	SYMBOL	RATING	UNIT
Junction to Lead	θ_{JL}	250	°C/W

Note: Device mounted on FR-4 PCB with 1 inch copper pad layout.

■ ELECTRICAL CHARACTERISTICS

($V_F = 1.2V$ Max @ $I_F = 100mA$ for all types.)

Part Number	Marking Code	Nominal Zener Voltage			Zener Impedance				Reverse Leakage Current		Zener Current
		$V_Z @ I_{ZT}$ (V)			$Z_{ZT} @ I_{ZT}$		$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$		$I_{ZM} @ T_A$
		MIN	TYP	MAX	Max (Ω)	I_Z (mA)	Max (Ω)	I_Z (mA)	Max (μA)	@ V_R (V)	mA
UMMSZ5231A	5.1	5.0	5.1	5.2	17	20	1600	0.25	5.0	2.0	89
UMMSZ5234A	6.2	6.08	6.2	6.32	7	20	1000	0.25	5.0	4.0	73
UMMSZ5248A	18	17.64	18	18.36	21	7	600	0.25	0.1	14	25
UMMSZ5250A	20	19.6	20	20.4	25	6.2	600	0.25	0.1	15	23

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