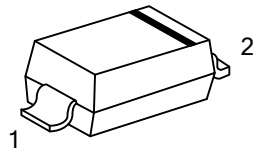
UMMSZ52XXA

Preliminary

DIODE

SURFACE MOUNT SILICON ZENER DIODE



SOD-123

■ DESCRIPTION

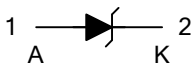
The UTC **UMMSZ52XXA** is a surface mount silicon zener diode, it uses UTC's advanced technology to provide customers with low reverse leakage current, etc.

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

■ FEATURES

* Low reverse leakage current

■ SYMBOL



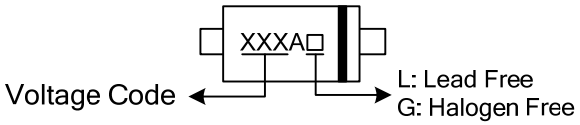
■ ORDERING INFORMATION

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

UMMSZ52XXAL-CA2-R (1)Packing Type (2)Package Type (3)Lead Free (4)Output Voltage	(1) R: Tape Reel (2) CA2 : SOD-123 (3) L: Lead Free, G: Halogen 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 5.0mm^2 (.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