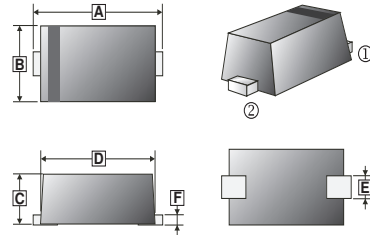


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Wide Zener Voltage Range Selection, 2.4V to 75V
- Flat Lead SOD-523 Small Outline Plastic Package
- Extremely Small SOD-523 Package
- Surface Device Type Mounting
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

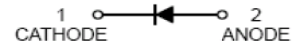
SOD-523



PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-523	3K	7 inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.50	1.70	D	1.10	1.30
B	0.70	0.90	E	0.25	0.35
C	0.50	0.77	F	0.07	0.20



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Power Dissipation	P _D	200	mW
Operating and Storage Temperature Range	T _J , T _{STG}	-55~150	°C

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified, $V_F=1\text{V}$ Maximum @ $I_F=10\text{mA}$)

Type Number	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Leakage Current	
		$V_Z@I_{ZT}$			I_{ZT}	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$	I_{ZK}	$I_R@V_R$	
		Min(V)	Nom(V)	Max(V)	mA	Ω	Ω	mA	μA	V
MT5Z2V4	50	2.2	2.4	2.6	5	100	1000	1	50	1
MT5Z2V7	51	2.5	2.7	2.9	5	100	1000	1	20	1
MT5Z3V0	52	2.8	3.0	3.2	5	100	1000	1	10	1
MT5Z3V3	53	3.1	3.3	3.5	5	95	1000	1	5	1
MT5Z3V6	54	3.4	3.6	3.8	5	90	1000	1	5	1
MT5Z3V9	55	3.7	3.9	4.1	5	90	1000	1	3	1
MT5Z4V3	56	4.0	4.3	4.6	5	90	1000	1	3	1
MT5Z4V7	57	4.4	4.7	5.0	5	80	800	1	3	2
MT5Z5V1	58	4.8	5.1	5.4	5	60	500	1	2	2
MT5Z5V6	59	5.2	5.6	6.0	5	40	200	1	1	2
MT5Z6V2	5A	5.8	6.2	6.6	5	10	100	1	3	4
MT5Z6V8	5B	6.4	6.8	7.2	5	15	160	1	2	4
MT5Z7V5	5C	7.0	7.5	7.9	5	15	160	1	1	5
MT5Z8V2	5D	7.7	8.2	8.7	5	15	160	1	0.7	5
MT5Z9V1	5E	8.5	9.1	9.6	5	15	160	1	0.2	7
MT5Z10V	5F	9.4	10	10.6	5	20	160	1	0.1	8
MT5Z11V	5G	10.4	11	11.6	5	20	160	1	0.1	8
MT5Z12V	5H	11.4	12	12.7	5	25	80	1	0.1	8
MT5Z13V	5J	12.4	13	14.1	5	30	80	1	0.1	8
MT5Z15V	5K	14.3	15	15.8	5	30	80	1	0.05	10.5
MT5Z16V	5L	15.3	16	17.1	5	40	80	1	0.05	11.2
MT5Z18V	5M	16.8	18	19.1	5	45	80	1	0.05	12.6
MT5Z20V	5N	18.8	20	21.2	5	55	100	1	0.05	14
MT5Z22V	5P	20.8	22	23.3	5	55	100	1	0.05	15.4
MT5Z24V	5R	22.8	24	25.6	5	70	120	1	0.05	16.8
MT5Z27V	5S	25.1	27	28.9	2	80	300	0.5	0.05	18.9
MT5Z30V	5T	28	30	32	2	80	300	0.5	0.05	21
MT5Z33V	5U	31	33	35	2	80	300	0.5	0.05	23.2
MT5Z36V	5V	34	36	38	2	90	500	0.5	0.05	25.2
MT5Z39V	5X	37	39	41	2	130	500	0.5	0.05	27.3

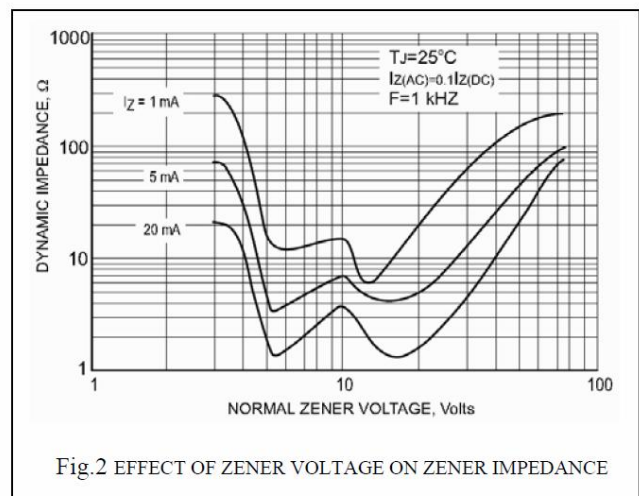
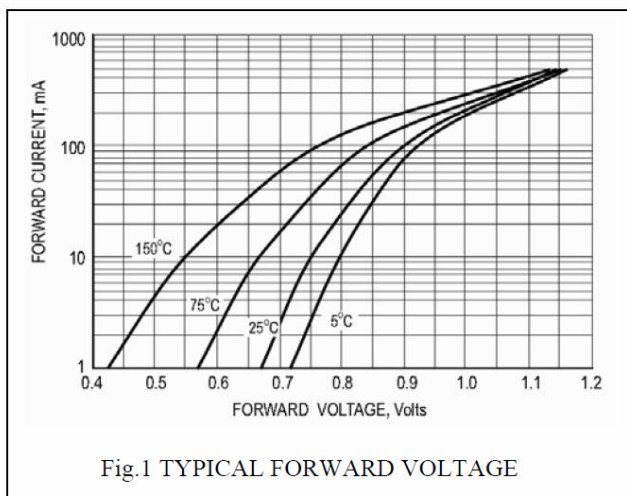
ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified, $V_F=1\text{V}$ Maximum @ $I_F=10\text{mA}$)

Type Number	Marking	Zener Voltage Range			Maximum Zener Impedance			Maximum Reverse Leakage Current		
		$V_Z@I_{ZT}$			I_{ZT}	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$	I_{ZK}	$I_R@V_R$	
		Min(V)	Nom(V)	Max(V)	mA	Ω	Ω	mA	μA	V
MT5Z43V	5Y	40	43	46	2	150	500	0.5	0.05	30.1
MT5Z47V	5Z	44	47	50	2	170	500	0.5	0.05	32.9
MT5Z51V	5-	48	51	54	2	180	500	0.5	0.05	35.7
MT5Z56V	5=	52	56	60	2	200	500	0.5	0.05	39.2
MT5Z62V	5≡	58	62	66	2	215	500	0.5	0.05	43.4
MT5Z68V	5>	64	68	72	2	240	500	0.5	0.05	47.6
MT5Z75V	5<	70	75	79	2	255	500	0.5	0.05	52.5

Notes:

1. The zener voltage (V_Z) is tested under pulse condition of 10mS.
2. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed to I_{ZT} or I_{ZK} .

CHARACTERISTIC CURVES



CHARACTERISTIC CURVES

