

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

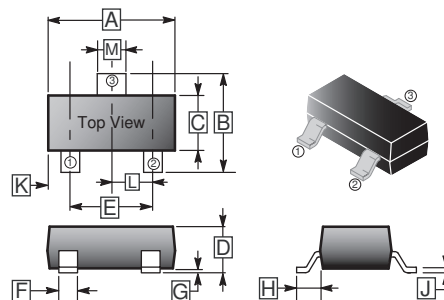
FEATURES

- 150mW Power Dissipation Rating.
- Ultra-Small Surface Mount Package
- Planar Die Construction

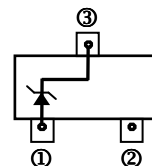
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-523	3K	7 inch

SOT-523



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.5	1.7	G	-	0.1
B	1.45	1.75	H	0.55	REF.
C	0.75	0.85	J	0.1	0.2
D	0.7	0.9	K	-	-
E	0.9	1.1	L	0.5	TYP.
F	0.15	0.25	M	0.25	0.325



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

Parameter	Symbol	Rating	Unit
Forward Voltage I _F =10mA	V _F	0.9	V
Power Dissipation ¹	P _D	150	mW
Thermal Resistance, Junction to Ambient Air ¹	R _{θJA}	833	°C / W
Operating and Storage Temperature Range	T _J , T _{STG}	-65~150	°C

Notes:

1. Device mounted on FR-4 PC board with recommended pad layout.
2. No purposefully added lead.

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Type Number	Marking	Zener Voltage Range ³				Maximum Zener Impedance ⁴			Maximum Reverse Current ³		Temperature Coefficient of Zener Voltage	
		$V_Z@I_{ZT}$			I_{ZT}	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$	I_{ZK}	I_R	@ V_R	@ $I_{ZT}=5\text{mA}$ (mV/°C)	
		Min(V)	Nom(V)	Max(V)	mA	Ω	Ω	mA	μA	V	Min	Max
MM5Z2V4T	RB	2.2	2.4	2.6	5	100	600	1	50	1	-3.5	0
MM5Z2V7T	RC	2.5	2.7	2.9	5	100	600	1	20	1	-3.5	0
MM5Z3V0T	RD	2.8	3	3.2	5	95	600	1	20	1	-3.5	0
MM5Z3V3T	RE	3.1	3.3	3.5	5	95	600	1	5	1	-3.5	0
MM5Z3V6T	RF	3.4	3.6	3.8	5	90	600	1	5	1	-3.5	0
MM5Z3V9T	RG	3.7	3.9	4.1	5	90	600	1	3	1	-3.5	0
MM5Z4V3T	RH	4	4.3	4.6	5	90	600	1	3	1	-3.5	0
MM5Z4V7T	R1	4.4	4.7	5	5	80	600	1	3	2	-3.5	0.2
MM5Z5V1T	R2	4.8	5.1	5.4	5	60	500	1	2	2	-2.7	1.2
MM5Z5V6T	R3	5.2	5.6	6	5	40	480	1	1	2	-2	2.5
MM5Z6V2T	R4	5.8	6.2	6.6	5	10	400	1	3	4	0.4	3.7
MM5Z6V8T	R5	6.4	6.8	7.2	5	15	150	1	2	4	1.2	4.5
MM5Z7V5T	R6	7	7.5	7.9	5	15	80	1	1	5	2.5	5.3
MM5Z8V2T	R7	7.7	8.2	8.7	5	15	80	1	0.7	5	3.2	6.2
MM5Z9V1T	R8	8.5	9.1	9.6	5	15	80	1	0.5	6	3.8	7
MM5Z10T	R9	9.4	10	10.6	5	20	100	1	0.2	7	4.5	8
MM5Z11T	P1	10.4	11	11.6	5	20	150	1	0.1	8	5.4	9
MM5Z12T	P2	11.4	12	12.7	5	25	150	1	0.1	8	6	10
MM5Z13T	P3	12.4	13	14.1	5	30	150	1	0.1	8	7	11
MM5Z15T	P4	13.8	15	15.6	5	30	170	1	0.1	10.5	9.2	13
MM5Z16T	P5	15.3	16	17.1	5	40	200	1	0.1	11.2	10.4	14
MM5Z18T	P6	16.8	18	19.1	5	45	200	1	0.1	12.6	12.4	16
MM5Z20T	P7	18.8	20	21.2	5	55	225	1	0.1	14.0	14.4	18
MM5Z22T	P8	20.8	22	23.3	5	55	225	1	0.1	15.4	16.4	20
MM5Z24T	P9	22.8	24	25.6	5	70	250	1	0.1	16.8	18.4	22
MM5Z27T	PA	25.1	27	28.9	2	80	250	0.5	0.1	18.9	21.4	25.3
MM5Z30T	PB	28	30	32	2	80	300	0.5	0.1	21	24.4	29.4
MM5Z33T	PC	31	33	35	2	80	300	0.5	0.1	23.1	27.4	33.4
MM5Z36T	PD	34	36	38	2	90	325	0.5	0.1	25.2	30.4	37.4
MM5Z39T	PE	37	39	41	2	130	350	0.5	0.1	27.3	33.4	41.2

Notes:

3. Short duration pulse test used to minimize self-heating effect
4. $f=1\text{KHz}$