

Part Number: **MMBZ SOT23 TVS**
Weight (mg): 8.63

Part Numbers: MMBZ10VAL-7-F, MMBZ15VAL-7-F, MMBZ15VDL-7-F,
MMBZ18VAL-7-F, MMBZ20VAL-7-F, MMBZ27VAL-7-F,
MMBZ27VCL-7-F, MMBZ33VAL-7-F, MMBZ5V6AL-7-F,
MMBZ6V2AL-7-F, MMBZ6V8AL-7-F, MMBZ9V1AL-13-F,
MMBZ9V1AL-7-F

Element	Material Group	Materials	CAS (if applicable)	Average mass homogeneous Material(%)	Percent of whole (%)	Mass (mg)	ppm Homogeneous Material	ppm overall
Chip	Silicon w/Metal	Doped Silicon *	7440-21-3	100.00%	4.96	0.43	1000000	49553
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	28.31	2.44	576500	163189
		Ni	7440-02-0	41.00%			410000	116058
		Mn	7439-96-5	0.60%			6000	1698
		Cr(not Cr 6+)	7440-47-3	0.10%			1000	283
		Co	7440-48-4	0.50%			5000	1415
		Si	7440-21-3	0.15%			1500	425
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	1.20	0.10	1000000	11980
Bond Wire	Gold Wire	Gold	7440-57-5	100.00%	1.19	0.10	1000000	11852
Encapsulation	KTMC-1050G	SiO2	60676-86-0	69.00%	61.39	5.30	690000	423620
		Epoxy Resin	29690-82-2	14.00%			140000	85952
		Phenol Resin	9003-35-4	7.00%			70000	42976
		Mg(OH)2	1309-42-8	8.00%			80000	49115
		C	1333-86-4	0.20%			2000	1228
		others	----	1.80%			18000	11051
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	2.96	0.26	1000000	29602
Total					100.00	8.63		1000000

Tolerance ±10%

This data is based on information provided by our suppliers. We believe it to be correct but do not routinely validate it by measurement. It is for guidance only and Diodes Inc. does not guarantee its absolute accuracy or completeness

* The Silicon Chip is doped at atomic levels with trace amounts of elements that may include Phosphorus, Boron, Arsenic, and other elements. Metalization may include Titanium, Nickel, Aluminum, Silver or Gold. These substances are not reported where their concentration is less than the minimum reportable level per the guidelines specified in the Tables of EIA JIG-101, Material Composition Declaration for Electronic Products.

This product or product family does not contain any of the following substances except as **CURRENTLY** exempted by ELV II and RoHS and reported above:

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| Asbestos | Ozone Depleting Substances - Class I (CFCs, HBFCs, etc.) |
| Azo compounds | Ozone Depleting Substances - Class II (HCFCs) |
| Cadmium and cadmium compounds | Perfluorooctane Sulphonate (PFOS) or related compounds |
| Certain Shortchain Chlorinated Paraffins | Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) including DecaBDE |
| Chlorinated organic compounds | Polychlorinated Biphenyls (PCBs) |
| Hexavalent chromium compounds | Polychlorinated Naphthalenes (> 3 chlorine atoms) |
| Lead and lead compounds | Radioactive Substances |
| Mercury and mercury compounds | Tributyl Tin (TBT) and Triphenyl Tin (TPT) |
| Organic tin compounds | Tributyl Tin Oxide (TBTO) |