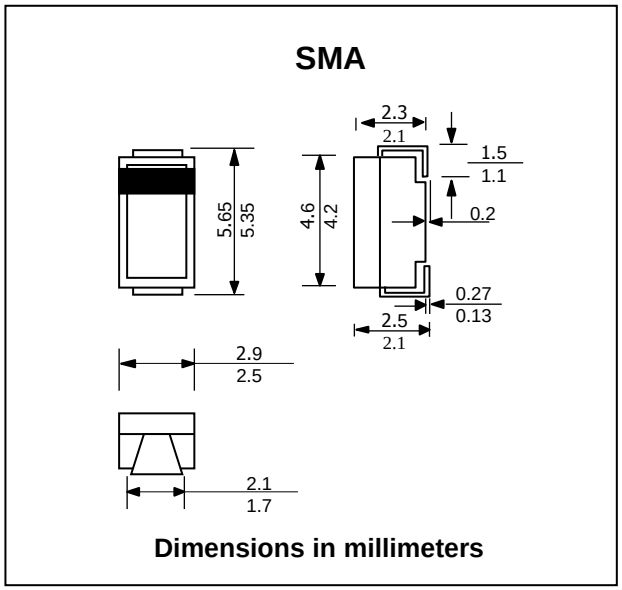
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SMAZ5V1 - SMAZ39

SURFACE MOUNT SILICON ZENER DIODES

V_Z : 5.1 - 39 Volts
P_D : 1 Watt



FEATURES :

* Complete Voltage Range 5.1 to 39 Volts
* High Surge Capability
* Ideally Suited for Automatic Assembly
* Standard Vz Tolerance is ± 5%
* Pb / RoHS Free

MECHANICAL DATA :

* Case : SMA Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.060 gram (Approximately)

MAXIMUM RATINGS

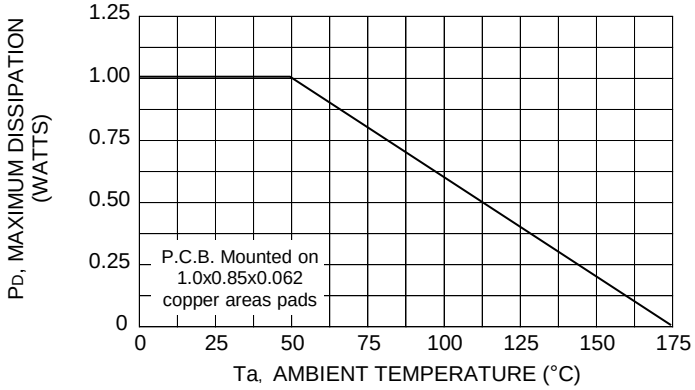
Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at Ta = 50 °C (Note1)	P_D	1.0	W
Maximum Forward Voltage at I_F = 200 mA	V_F	1.2	V
Temperature Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	125	°C
Junction and Storage Temperature Range	T_{STG}	- 65 to + 150	°C

Note :

(1) P.C.B. Mounted on 1.0" x 0.85" x 0.062" copper areas pads.

Fig. 1 MAXIMUM CONTINUOUS POWER DERATING



ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

Type Number	Zener Voltage (2) V_Z @ I_{ZT}				Maximum Zener Impedance			Maximum Reverse Leakage Current, I_R		Maximum DC Zener Current(1)
	Nom	Min	Max	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{Zk} @ I_{ZK}	I_{ZK}	I_R	@ V_R	
	(V)	(V)	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	I_{ZM} (mA)
SMAZ5V1	5.1	4.84	5.40	100	5.0	500	1.0	2.5	1.0	196
SMAZ5V6	5.6	5.32	5.88	100	2.0	250	2.0	5.0	2.0	179
SMAZ6V2	6.2	5.89	6.51	100	2.0	200	2.0	5.0	3.0	161
SMAZ6V8	6.8	6.46	7.14	100	2.0	200	1.0	5.0	4.0	147
SMAZ7V5	7.5	7.13	7.88	100	2.0	450	1.0	5.0	5.0	133
SMAZ8V2	8.2	7.79	8.61	100	2.0	200	1.0	5.0	6.0	122
SMAZ9V1	9.1	8.65	9.56	50	4.0	200	1.0	5.0	7.0	110
SMAZ10	10.0	9.50	10.50	50	4.0	200	1.0	1.0	7.6	100
SMAZ12	12.0	11.40	12.60	50	7.0	150	1.0	1.0	9.1	83
SMAZ15	15.0	14.25	15.75	50	10	150	1.0	1.0	11.4	67
SMAZ16	16.0	15.20	16.80	25	15	150	1.0	0.5	12.2	63
SMAZ18	18.0	17.10	18.90	25	15	150	1.0	0.5	13.7	56
SMAZ20	20.0	19.00	21.00	25	15	180	1.0	0.5	15.2	50
SMAZ22	22.0	20.90	23.10	25	15	180	1.0	0.5	16.7	45
SMAZ24	24.0	22.80	25.20	25	15	180	1.0	0.5	18.2	42
SMAZ27	27.0	25.65	28.35	25	15	200	1.0	0.5	20.5	37
SMAZ30	30.0	28.50	31.50	25	15	250	1.0	0.5	22.8	33
SMAZ33	33.0	31.35	34.65	25	15	300	1.0	0.5	25.1	30
SMAZ36	36.0	34.20	37.80	10	40	350	1.0	0.5	27.4	28
SMAZ39	39.0	37.05	40.95	10	40	450	1.0	0.5	29.6	26

Notes :

(1) P.C.B. Mounted on 1.0" x 0.85" x 0.062" copper areas pads.

(2) Short duration test pulse used to minimize self-heating effect.

(3) "SMA" will be omitted in marking on the diode.

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1SMA4734A HVR520 SZ457F 1N5339B 20HCC SZ15B2 SZ6582 1N5954B FR606 MM3Z36B MZ5954A SMBJ5385B SZ5562 15HCB MMBZ5247B SZ15B0 SZ3562 1N4746A 2EZ4.3D5 30KP170 30KP400A 30KP400CA SK33S SZ2568 SZ558C BZG05C3V3 SMAZ5V6 SMBJ5377B SZ256I 2EZ8.2D5