NTC Thermistors

SMD Thermistors

RoHS

TSM Series

MERITEK

Features

UL E223037

1. EIA size 0402, 0603, 0805, 1206
2. Highly reliable monolithic structure
3. Wide resistance range
4. Cost effective
5. Agency recognition: UL



PART NUMBERING SYSTEM

TSM	2	A	104	H	39	H	2	R

Meritek Series

Size

CODE	1	2
	0603	0805

Beta Value

CODE	A	B
	$B_{25/85}$	$B_{25/50}$

Part No. (R25)

CODE	102	103
	1K	10K

Tolerance of Resistor

CODE	F	G	H	J	K
(%)	± 1	± 2	± 3	± 5	± 10

Beta Value—first 2 digits

CODE	30	31	....	39	40	41	.....
	30	31	....	39	40	41	....

Beta Value—last 2 digits

CODE	0	A	1	.	2	D	...	5	F	....	H	H
	00	05	10	...	20	35	...	50	55	....	75	75

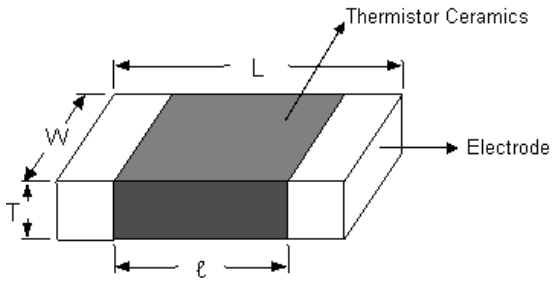
Tolerance of Beta Value

CODE	1	2	3	...
(%)	± 1	± 2	± 3	...

Standard Packaging

CODE	R	B
	Reel	Bulk

Dimensions



Part no.	Size	L nor.	W nor.	T max.	ℓ min.
TSM0	0402	1.00±0.15	0.50±0.10	0.60	0.2
TSM1	0603	1.60±0.15	0.80±0.15	0.95	0.3
TSM2	0805	2.00±0.20	1.25±0.20	1.20	0.4
TSM3	1206	3.20±0.30	1.60±0.20	1.50	0.5

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■ Electrical Characteristics

Part No.	Zero Power Resistance at 25°C	Tolerance of R_{25}	B Value		Tolerance of B value	Max. Power Rating at 25°C	Dissipation Factor	Thermal Time Constant	Operating Temperature Range	Safety Approvals
	R_{25}(KΩ)	(±%)	(K)		(±%)	P_{max}(mW)	δ(mW/°C)	τ(Sec.)	T_L~T_U(°C)	UL
TSM0A103^34D*	10	1、2、3 5、10	25/85	3435	1、2、3	170	Approx. 1.7	Approx. 2	-40 ~ +125	
TSM0A103^391*	10			3910						
TSM0A223^393*	22			3930						
TSM0A333^393*	33			3930						
TSM0A473^393*	47			3930						
TSM0A503^395*	50			3950						
TSM0A683^405*	68			4050						
TSM0A104^39H*	100			3975						
TSM0A224^405*	220			4050						
TSM0A474^409*	470			4090						
TSM0B474^470*	470	5、10	25/50	4700	2、3					
TSM1A202^340*	2	1、2、3、5、10	25/85	3400	1、2、3	210	Approx 2.1	Approx 3.1	-40~+125	
TSM1A222^34D*	2.2			3435						
TSM1B222^395*	2.2	5、10	25/50	3950						
TSM1A472^34D*	4.7	1、2、3、5、10	25/85	3435						√
TSM1A472^367*	4.7			3670						√
TSM1A502^34D*	5			3435						√
TSM1A682^34D*	6.8			3435						
TSM1A682^430*	6.8	5、10		4300						
TSM1A103^34D*	10	1、2、3、5、10		3435						√
TSM1A103^39H*	10			3975						√
TSM1B103^425*	10		25/50	4250						
TSM1A123^380*	12		25/85	3800						
TSM1A153^395*	15			3950						
TSM1A223^39H*	22			3975						
TSM1A333^39H*	33			3975						
TSM1A473^39H*	47			3975						√
TSM1A503^39H*	50			3975						√
TSM1A683^39H*	68			3975						
TSM1A104^405*	100			4050						√
TSM1B104^425*	100		25/50	4250						
TSM1A104^436*	100		25/85	4360						√
TSM1A154^406*	150			4060						√
TSM1A204^410*	200			4100						√
TSM1A224^410*	220			4100						√
TSM1A334^415*	330			4150						
TSM1A474^410*	470			4100						
TSM1B474^446*	470		25/50	4460						

Note 1: ^ = Tolerance of R_{25}

Note 2: * = Tolerance of B value

*Special specification are available upon request

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■ Electrical Characteristics

Part No.	Zero Power Resistance at 25°C	Tolerance of R_{25}	B Value		Tolerance of B value	Max. Power Rating at 25°C	Dissipation Factor	Thermal Time Constant	Operating Temperature Range	Safety Approvals
	R_{25}(KΩ)	(±%)	(K)		(±%)	P_{max}(mW)	δ(mW/°C)	τ(Sec.)	T_L~T_U(°C)	UL
TSM2A102^320*	1	1、2、3、5、10	25/85	3200	1、2、3	240	Approx 3.2	Approx 5.4	-40~+125	√
TSM2A472^34D*	4.7			3435						
TSM2A502^34D*	5			3435						
TSM2A682^34D*	6.8			3435						
TSM2A103^34D*	10			3435						
TSM2A103^380*	10			3800						√
TSM2A103^39H*	10			3975						√
TSM2A153^395*	15			3950						
TSM2A203^395*	20			3950						
TSM2A223^380*	22			3800						
TSM2A223^39H*	22			3975						
TSM2A303^39H*	30			3975						
TSM2A473^39H*	47			3975						√
TSM2A503^39H*	50			3975						√
TSM2A683^39H*	68			3975						
TSM2A104^405*	100			4050	1、2、3	240	Approx 3.2	Approx 5.4	-40~+125	√
TSM2A204^410*	200			4100						√
TSM2A224^410*	220			4100						√
TSM3A472^34D*	4.7	1、2、3、5、10	25/85	3435	1、2、3	320	Approx 3.2	Approx 6.7	-40~+125	
TSM3A502^34D*	5			3435						
TSM3A103^34D*	10			3435						
TSM3A103^39H*	10			3975						
TSM3A223^39H*	22			3975						
TSM3A473^39H*	47			3975						
TSM3A503^39H*	50			3975						
TSM3A683^39H*	68			3975						
TSM3A104^405*	100			4050						
TSM3A204^410*	200			4100						
TSM3A224^410*	220			4100						
TSM3A474^425*	470			4250						

Note 1: ^ = Tolerance of R_{25}

Note 2: * = Tolerance of B value

*Special specification are available upon request