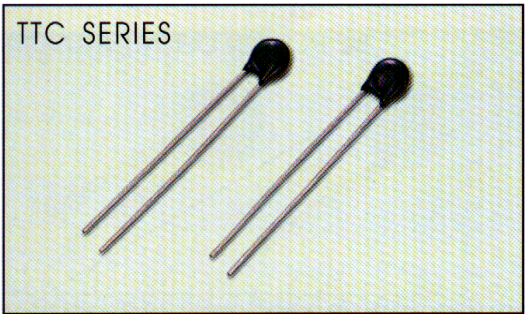




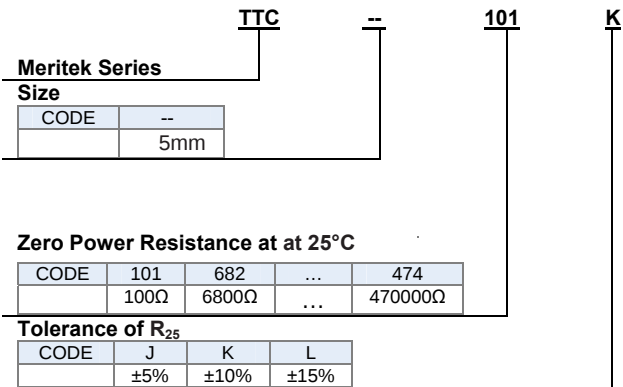
Features

- 1. RoHS compliant
- 2. Body size $\Phi 3\text{mm}$
- 3. Radial lead resin coated
- 4. $-40 \sim +125$ operating temperature range
- 5. Wide resistance range
- 6. Cost effective
- 7. Agency recognition: UL

UL E223037

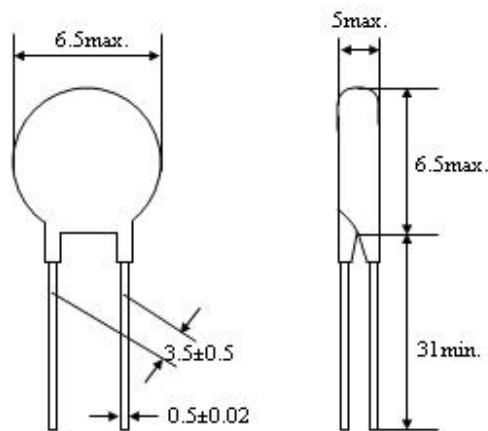


PART NUMBERING SYSTEM

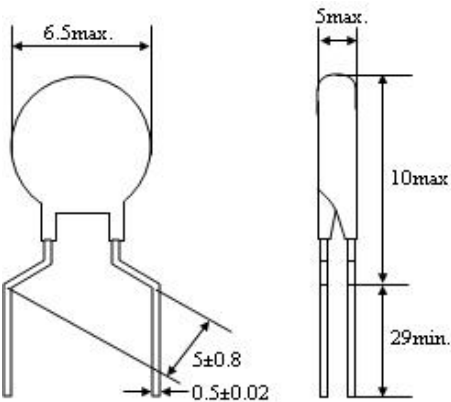


Structure and Dimensions

S type (Straight lead)



I type (Inner kink lead)



(unit: mm)



Electrical Characteristics

Part No.	Zero Power Resistance at 25°C	Tolerance of R ₂₅	B _{25/50} Value	Max. Power Rating at 25°C	Dissipation Factor	Thermal Time Constant	Operating Temperature Range	Safety Approvals
	R ₂₅ (Ω)	(±%)	(K)	P _{max} (mW)	δ(mW/°C)	τ(Sec.)	T _L ~T _U (°C)	UL
TTC--005 [^]	5	5、10、15	2400	450	Approx. 4.5	Approx. 20	-30~+125	
TTC--010 [^]	10		2800					
TTC--015 [^]	15		2800					√
TTC--020 [^]	20		2800					√
TTC--025 [^]	25		2900					√
TTC--045 [^]	45		3100					√
TTC--050 [^]	50		3100					√
TTC--060 [^]	60		3100					√
TTC--085 [^]	85		3200					√
TTC--090 [^]	90		3200					√
TTC--101 [^]	100		3200					√
TTC--121 [^]	120		3300					√
TTC--151 [^]	150		3300					√
TTC--201 [^]	200		3500					√
TTC--221 [^]	220		3500					√
TTC--251 [^]	250		3500					√
TTC--301 [^]	300		3800					√
TTC--471 [^]	470		3500					√
TTC--501 [^]	500		3700					√
TTC--681 [^]	680		3800					√
TTC--701 [^]	700		3800					√
TTC--102 [^]	1000		3800					√
TTC--152 [^]	1500		3950					√
TTC--202 [^]	2000		4000					√
TTC--222 [^]	2200		4000					√
TTC--252 [^]	2500		4000					√
TTC--302 [^]	3000		4000					√
TTC--332 [^]	3300		4000					√
TTC--402 [^]	4000		4000					√
TTC--472 [^]	4700		4050					√
TTC--502 [^]	5000		3950					√
TTC--602 [^]	6000		4050					√
TTC--682 [^]	6800		4050					√
TTC--802 [^]	8000		4050					√
TTC--103 [^]	10000		4050					√
TTC--123 [^]	12000		4050					√
TTC--153 [^]	15000		4150					√
TTC--203 [^]	20000		4250					√
TTC--303 [^]	30000		4250					√
TTC--473 [^]	47000		4300					√
TTC--503 [^]	50000		4300					√
TTC--104 [^]	100000		4400					√
TTC--154 [^]	150000		4500					√
TTC--204 [^]	200000		4600					√
TTC--224 [^]	220000		4600					
TTC--474 [^]	470000		4750					√

Note : [^] = Tolerance of R₂₅



Features

- 1. RoHS compliant
- 2. Body size $\Phi 3\text{mm}$
- 3. Radial lead resin coated
- 4. $-40 \sim +125^{\circ}\text{C}$ operating temperature range
- 5. Wide resistance range
- 6. Cost effective
- 7. Agency recognition: UL

UL E223037



PART NUMBERING SYSTEM

TTC 03 A 901 F 39 D 1

Meritek Series Size

CODE	03
	3 $\varnothing$

Beta Value

CODE	A	B
	B _{25/85}	B _{25/50}

Part No. (R25)

CODE	102	103
	1K Ω	10K Ω

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	...

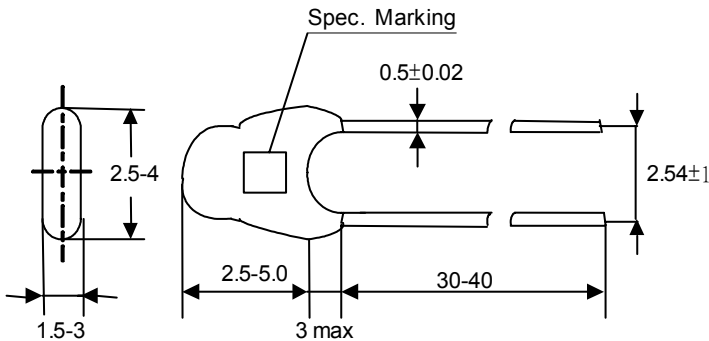
Beta Value—last 2 digits

CODE	0	1	...	A	B	C	D	E	F	G	H
	00	10	...	05	15	25	35	45	55	65	75

Tolerance of Beta Value

CODE	1	2	3	...
(%)	± 1	± 2	± 3	...

Structure and Dimensions





Electrical Characteristics

Part No.	Zero Power Resistance at 25°C	Tolerance of R ₂₅	B _{25/85} 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
TTC03A901^39D*	0.9	1、2、3、 5、10	3935	1□2□3	150	□2.5	□18	-40~+125	√
TTC03A102^39D*	1		3935						√
TTC03A152^39D*	1.5		3935						√
TTC03A202^39H*	2		3975						√
TTC03A222^39H*	2.2		3975						√
TTC03A272^39H*	2.7		3975						√
TTC03A302^39H*	3		3975						√
TTC03A332^39H*	3.3		3975						√
TTC03A472^39H*	4.7		3975						√
TTC03A502^39H*	5		3975						√
TTC03A682^39H*	6.8		3975						√
TTC03A103^34D*	10		3435						√
TTC03A103^374*	10		3740						√
TTC03A103^39H*	10		3975						√
TTC03A123^374*	12		3740						√
TTC03A153^374*	15		3740						√
TTC03A203^374*	20		3740						√
TTC03A223^374*	22		3740						√
TTC03A333^409*	33		4090						√
TTC03A473^409*	47		4090						√
TTC03A503^39H*	50		3975						√
TTC03A503^406*	50		4060						√
TTC03A683^419*	68		4190						√
TTC03A104^419*	100		4190						√
TTC03A154^437*	150		4370						√
TTC03A224^437*	220		4370						√
TTC03A334^457*	330		4570						√
TTC03A474^457*	470		4570						√

Note 1: ^ = Tolerance of rR₂₅

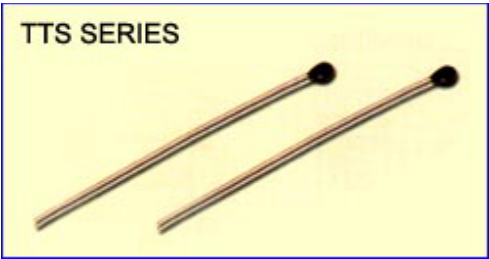
Note 2: * = Tolerance of B value



Features

- 1. RoHS compliant
- 2. Body size $\Phi 3\text{mm}$
- 3. Radial lead resin coated
- 4. $-40 \sim +125^{\circ}\text{C}$ operating temperature range
- 5. Wide resistance range
- 6. Cost effective
- 7. Agency recognition: UL

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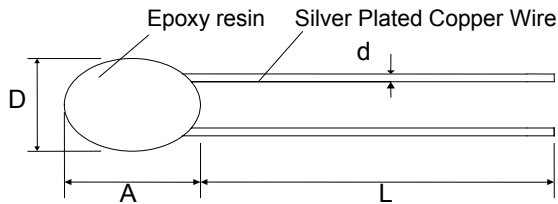


PART NUMBERING SYSTEM

TTS		2	B	502	2	2	Z	2	C
Meritek Series									
Size									
CODE	Body Size								
1	$\Phi 2.5\text{mm}(\text{max})\times 3\text{mm}(\text{max})$ Transparent Epoxy								
2	$\Phi 2.5\text{mm}(\text{max})\times 3\text{mm}(\text{max})$ Black Epoxy								
Beta Value									
CODE	A	B							
	B _{25/85}	B _{25/50}							
Part No. (R25)									
CODE	102	103							
	1K Ω	10K Ω							
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	1	...	A	B	C	D	E	F
	00	10	...	05	15	25	35	45	55
									65
Tolerance of Beta Value									
CODE	1	2	3	...					
(%)	± 1	± 2	± 3	...					
Appearance									
CODE	C	D	E	F					
	$\phi 0.25\text{mm}$ Silver plated Copper wire	$\phi 0.3\text{mm}$ Silver plated Copper wire	$\phi 0.23\text{mm}$ enameled Copper wire	$\phi 0.3\text{mm}$ enameled Copper wire					
	M	P	N						
	$\phi 0.23\text{mm}$ enameled manganin wire	$\phi 0.5\text{mm}$ enameled manganin wire	$\phi 0.23\text{mm}$ enameled constantan wire						

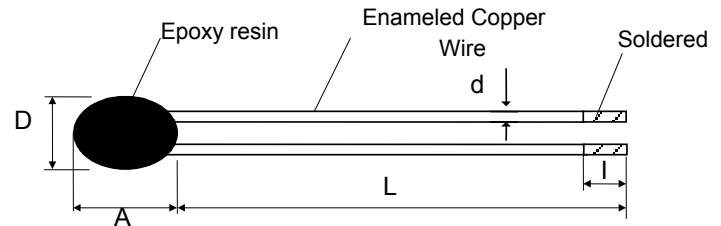
Structure and Dimensions

C Type



Part No.	Dmax.	Amax.	d	L
TTS1	1.6	3.0	0.25±0.02	40±2
TTS2	2.5	4.0		

E Type



Part No.	Dmax.	Amax.	d	L	l
TTS1	1.6	3.0	0.23±0.02	80±4	4±1
TTS2	2.5	4.0			

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
TTS#B502^327*	5	1,2,3, 5,10	25/50	3270	1,2,3	45	^1	^10	-40 ~ +100	√
TTS#B502^347*	5		25/50	3470						√
TTS#B502^365*	5		25/50	3650						√
TTS#B502^395*	5		25/50	3950						√
TTS#B103^338*	10		25/50	3380						√
TTS#B103^347*	10		25/50	3470						√
TTS#B103^395*	10		25/50	3950						√
TTS#A103^34D	10		25/85	3435						√
TTS#A103^39H	10		25/85	3975						√
TTS#B203^395*	20		25/50	3950						√
TTS#A203^34D*	20		25/85	3435						√
TTS#A303^395*	30		25/85	3950						√
TTS#B473^395*	47		25/50	3950						√
TTS#B503^395*	50		25/50	3950						√
TTS#A503^34D*	50		25/85	3435						√
TTS#A833^40B*	83		25/85	4015						√
TTS#A104^34D*	100		25/85	3435						√
TTS#B104^410*	100		25/50	4100						√
TTS#A104^425*	100		25/85	4250						√
TTS#B474^439*	470		25/50	4390						√
TTS#A504^427*	500		25/85	4270						√
TTS#B504^430*	500		25/50	4300						√

Note 1: # = Body Size , ^ = Tolerance of R₂₅ , * = Tolerance of B value

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Features

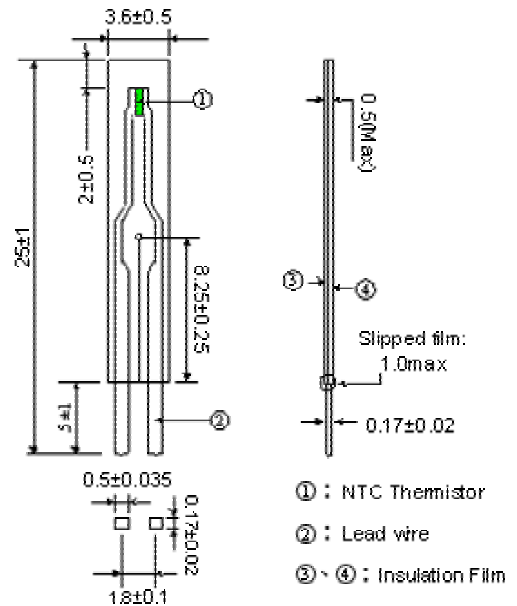
1. RoHS compliant
2. Radial leaded insulation film coated
3. -40 ~ +100°C operating temperature range
4. Agency recognition: UL



PART NUMBERING SYSTEM

Meritek Series	TTF	3	A	103	F	34	D	1
Chip Size	CODE 3	3Ø						
Beta Value	CODE	A	B					
		B _{25/85}	B _{25/50}					
Part No. (R25)	CODE	102	103					
		1KΩ	10KΩ					
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	1	...	A	B	C	D
		00	10	...	05	15	25	35
Tolerance of Beta Value	CODE	1	2	3				
(%)		±1	±2	±3				

Structure and Dimensions



Electrical Characteristics

Part No.	Zero Power Resistance at 25°C	Tolerance of R ₂₅	B _{25/85} 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
TTF3A502^34D*	5	1,2,3, 5,10	3435	1,2,3	3.5	Approx. 0.7	Approx. 5	-40 ~ +100	✓
TTF3A103^34D*	10								✓
TTF3A203^34D*	20								✓
TTF3A303^34D*	30								✓
TTF3A473^34D*	47								✓
TTF3A473^39H*	47		3975						✓
TTF3A473^419*	47		4190						✓
TTF3A503^34D*	50		3435						✓
TTF3A104^34D*	100		3975						✓
TTF3A104^39H*	100		4050						✓
TTF3A224^405*	220								✓

Note 1: ^ = Tolerance of R₂₅

Note 2: * = Tolerance of B value



UL E223037

Features

- 1. RoHS compliant.
- 2. Body size ϕ 2mm X 4mm.
- 3. Axial lead glass-sealed.
- 4. -40 ~ +300°C operating temperature range.
- 5. Agency recognition: UL.



PART NUMBERING SYSTEM

DHT

0

B

502

F

35

5

2

Meritek Series

Size

CODE	0
	ϕ 2X4

Beta Value

CODE	A	B
	B _{25/85}	B _{25/50}

Part No. (R25)

CODE	102	103
	1K Ω	10K Ω

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	...

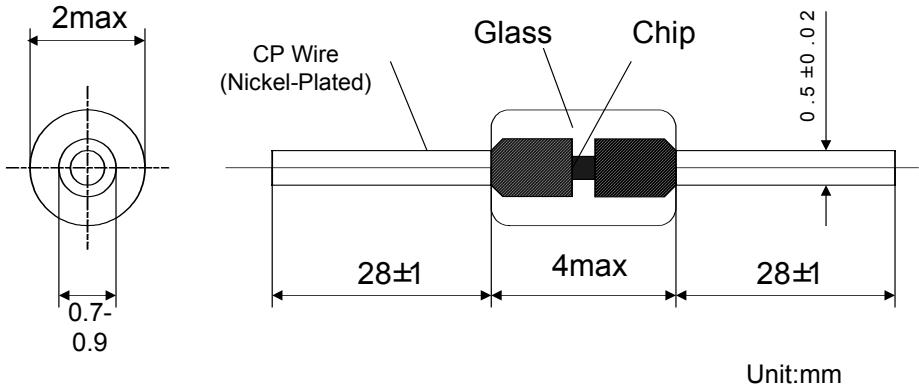
Beta Value—last 2 digits

CODE	0	1	...	A	B	C	D	E	F	G	H
	00	10	...	05	15	25	35	45	55	65	75

Tolerance of Beta Value

CODE	1	2	3	...
(%)	± 1	± 2	± 3	...

Structure and Dimensions





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
DHT0B502^355*	5	1,2,3, 5,10	25/50	3550	1,2,3	120	^2	^10	-40~+300 (Ni-plated cp wire)	√
DHT0B103^355*	10		25/50	3550						√
DHT0B103^395*	10		25/50	3950						√
DHT0A103^327*	10		25/85	3270						
DHT0A103^34D*	10		25/85	3435						√
DHT0A103^347*	10		25/85	3470						√
DHT0A103^370*	10		25/85	3700						√
DHT0A103^39H*	10		25/85	3975						√
DHT0B203^395*	20		25/50	3950						√
DHT0B203^420*	20		25/50	4200						√
DHT0B303^395*	30		25/50	3950						
DHT0B473^395*	47		25/50	3950						√
DHT0B503^395*	50		25/50	3950						√
DHT0B104^395*	100		25/50	3950						√
DHT0B104^400*	100		25/50	4000						√
DHT0A104^39H*	100		25/85	3975						√
DHT0A104^430*	100		25/85	4300						√
DHT0A204^400*	200		25/85	4000						√
DHT0A204^420*	200		25/85	4200						√
DHT0A204^430*	200		25/85	4300						√
DHT0B204^395*	200		25/50	3950						√
DHT0B204^420*	200		25/50	4200						√

Note 1: ^ = Tolerance of R₂₅

Note 2: * = Tolerance of B value