

# **SMD POWER INDUCTORS**

## **DTS403,DTS805 Series**

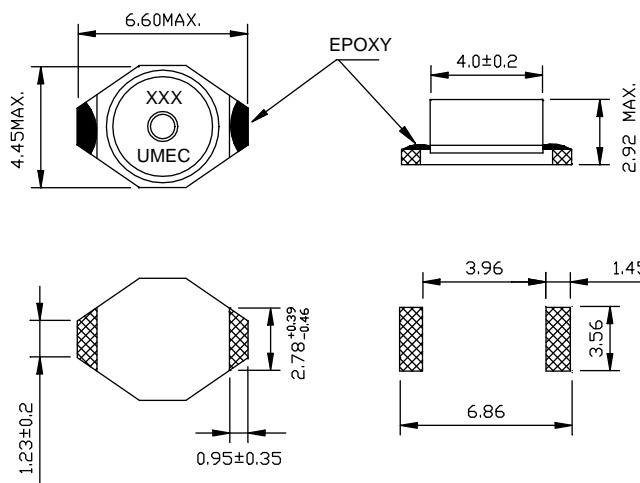
- 1 These series represents the ultimate in cost-effective, miniature power inductors. The DTS series is magnetically shield and the materials used provide nature heat sinking. This allows these parts to be used at relatively large currents. Even at 150% of rated current, the temperature rise is less than 15°C
  - 1 Operating temperature range: -40°C to +85°C

## ELECTRICAL SPECIFICATIONS @25°C

UMEC PART NUMBER	MARK	L±20% ( $\mu$ H)	DCR( $\Omega$ ) Max.	SRF typ. (MHz)	L ( $\mu$ H) <sup>1</sup> min. with Idc	Idc (A) <sup>2</sup> Rating
DTS403-1R0	1R0	1.0	0.045	180	0.6	2.0
DTS403-1R5	1R5	1.5	0.050	120	0.8	1.9
DTS403-2R2	2R2	2.2	0.060	100	0.9	1.5
DTS403-3R3	3R3	3.3	0.070	70	1.5	1.2
DTS403-4R7	4R7	4.7	0.080	60	2.0	1.2
DTS403-6R8	6R8	6.8	0.085	50	3.0	1.0
DTS403-100	100	10	0.095	45	5.0	0.7
DTS403-150	150	15	0.135	35	6.0	0.6
DTS403-220	220	22	0.160	25	10	0.5
DTS403-330	330	33	0.275	20	12	0.45
DTS403-470	470	47	0.300	17	20	0.34
DTS403-680	680	68	0.575	14	30	0.29
DTS403-101	101	100	1.10	12	40	0.24
DTS403-151	151	150	1.40	7	60	0.20
DTS403-221	221	220	2.25	7	90	0.17
DTS403-331	331	330	2.90	6	100	0.16
DTS403-471	471	470	3.60	4	150	0.14
DTS403-681	681	680	4.55	3.5	200	0.12
DTS403-102	102	1000	8.10	2.5	400	0.08

1. Measured at the rated current ( $I_{dc}$ ) with 100KHz, 0.1V,  $L_s$
  2. Average max. allowable current,  
These series are designed for current spikes as high as 2X the current rating.

## DIMENSION & DRAWING



**UNIVERSAL MICROELECTRONICS CO.,LTD.  
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**3,27TH RD.,TAICHUNG INDUSTRIAL PARK,  
TAICHUNG,TAIWAN,R.O.C**

# **SMD POWER INDUCTORS**

## **DTS403,DTS805 Series**

- 1 These magnetically shielded inductors are designed for a wide variety of applications including board mounted DC-DC converters, miniature power supplies, and voltage multiplying circuits. They function equally well in filter and smoothing circuit applications.
  - 1 These series represents the ultimate in costeffective miniature power inductors. They are constructed of materials specially developed for surfacemount applications to ensure the best possible reliability and ease of use and handling.
  - 1 Designed for current spikes as high as 2X the current rating.
  - 1 Operating temperature range: -40<sup>0</sup>C to +85<sup>0</sup>C

## ELECTRICAL SPECIFICATIONS @25°C

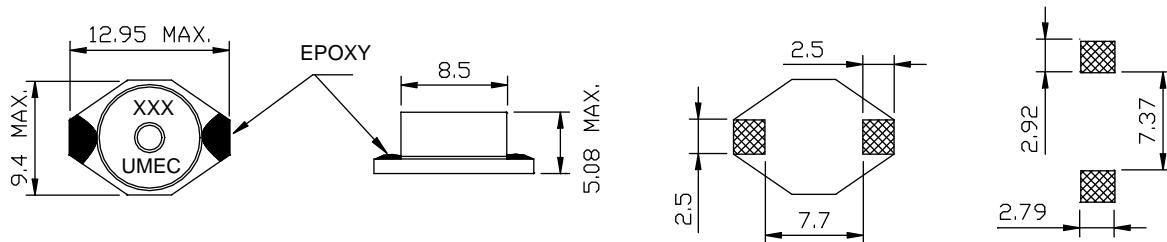
UMEC PART NUMBER	MARK	L±20% <sup>1</sup> (μH)	DCR(Ω) Max.	SRF typ. (MHz)	L rating <sup>2</sup> min. (μH)	I rating <sup>3</sup> (A)
DTS805-1R0	1R0	1.0	0.025	60	0.5	5.0
DTS805-1R5	1R5	1.5	0.030	55	0.7	5.0
DTS805-2R2	2R2	2.2	0.035	55	1.0	5.0
DTS805-3R3	3R3	3.3	0.040	50	1.5	5.0
DTS805-4R7	4R7	4.7	0.045	45	2.0	3.0
DTS805-6R8	6R8	6.8	0.050	40	4.0	2.5
DTS805-100	100	10	0.055	35	5.0	2.0
DTS805-150	150	15	0.060	25	6.0	1.8
DTS805-220	220	22	0.084	22	10	1.5
DTS805-330	330	33	0.090	18	12	1.3
DTS805-470	470	47	0.11	16	27	1.0
DTS805-680	680	68	0.15	12	40	0.90
DTS805-101	101	100	0.29	9	50	0.80
DTS805-151	151	150	0.36	8	80	0.60
DTS805-221	221	220	0.39	6	90	0.50
DTS805-331	331	330	0.73	5	150	0.40
DTS805-471	471	470	0.88	4	200	0.35
DTS805-681	681	680	1.15	3	300	0.30
DTS805-102	102	1000	1.45	2.5	420	0.25

### 3. Inductance tested at 100KHz, 0.1V, L<sub>s</sub>

4. Measured at the rated current.

#### 5. Average maximum allowable current.

## DIMENSION & DRAWING



\*Specifications are subject to change without prior notice.

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