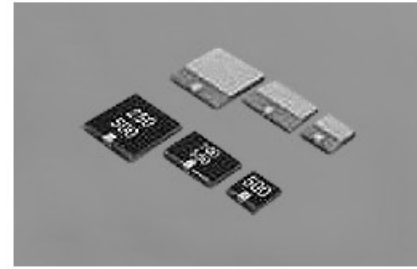


Surface Mount High Power Terminations

High power surface mount terminations for all DC to 5GHz applications. The small size and wide frequency range specifications are made possible with a large heat conducting AlN substrate. Mechanical strength metallization is possible using a sputtered thin film technology. 50 ohm resistance with tolerances of 1% and wattages of 10W, 50W, 100W and 250W are provided as standard. Other resistances and powers are available. Long life and temperature stability are the result of Ni-Cr thin film technology. Flanged terminations are available with the TFTF series. Applications include: Terminations for isolator / circulator, fixed station of mobile communication electronics, high power microwave amplifiers.



GENERAL SPECIFICATIONS

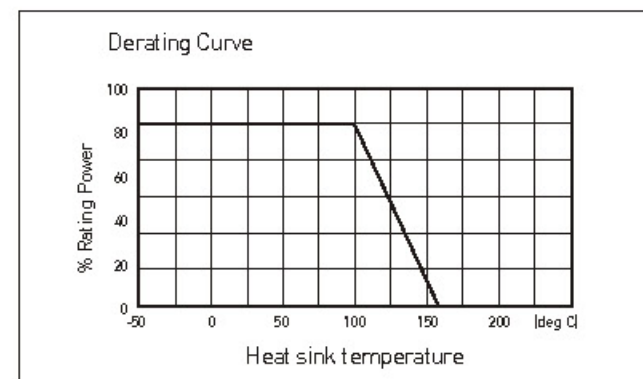
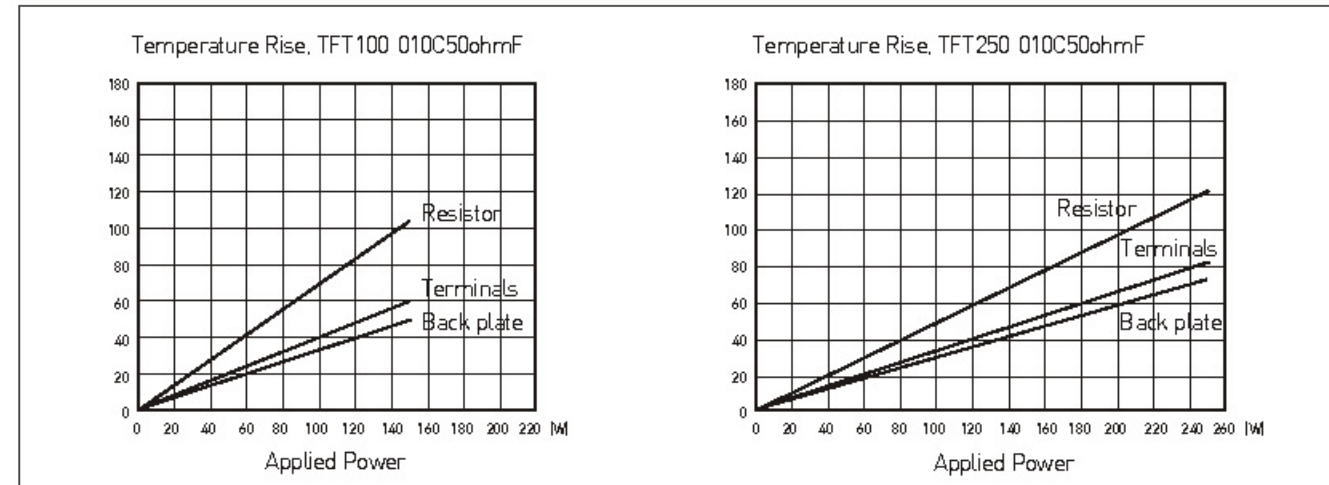
Model	Power Rating	*Maximum Power	Resistance Range	Tolerance(%)	TCR(ppm/°C)
TFT010	10W	20W	50Ω	F(±1)	50
TFT050	30W	50W			
TFT100	100W	200W			
TFT250	250W	500W			

Maximum Power: The condition is pulse < 1 second.

CHARACTERISTICS

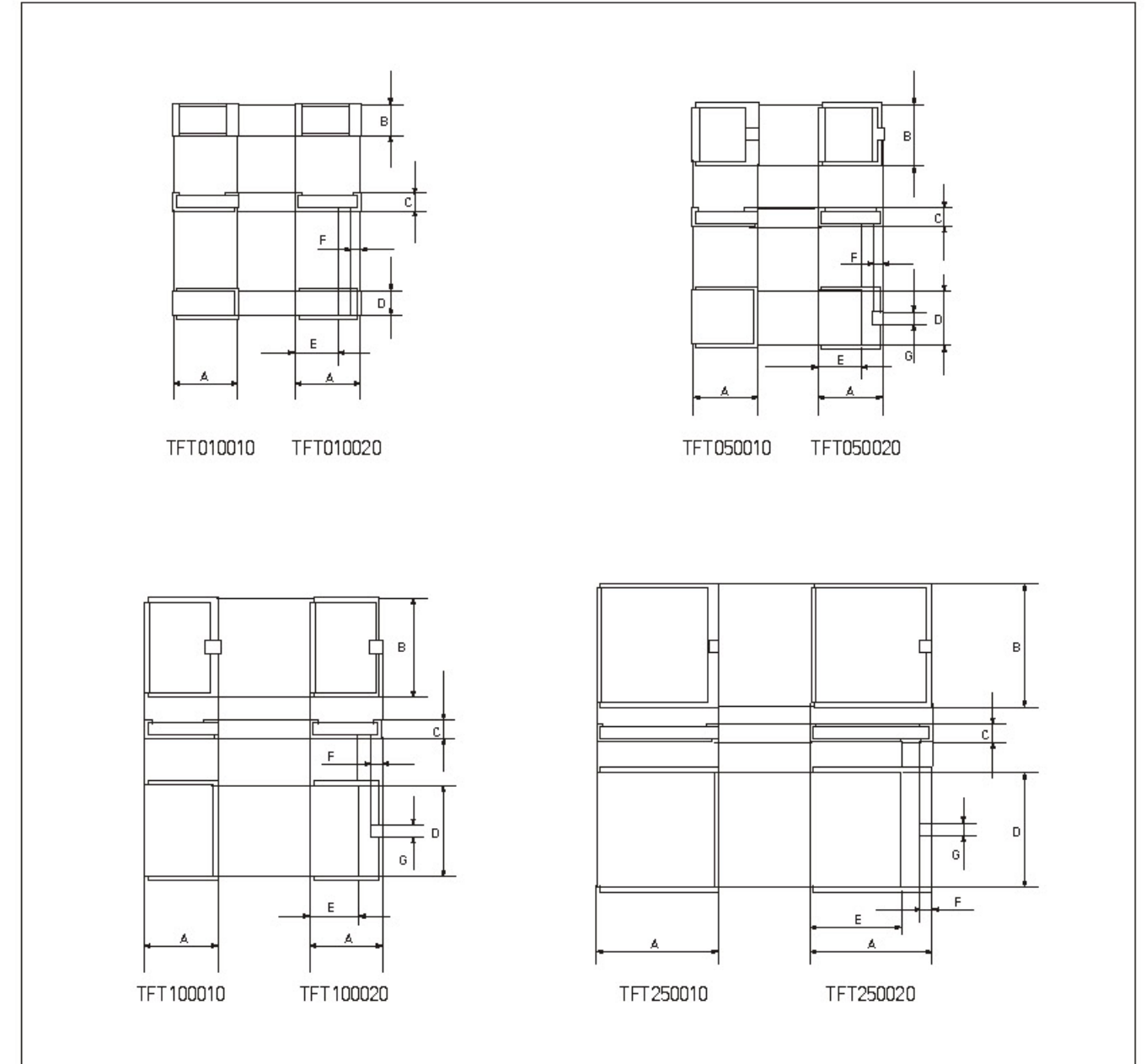
Model	TFT010	TFT050	TFT100	TFT250	Conditions
Heat Resistance[°C/W]	6.5	2.5	1.3	0.5	
VSWR at 3GHz	1.15	1.15	1.20	1.20	
Max Operating Temperature	-55°C ~ 155°C				
Storage Temperature	-55°C ~ 155°C				

SURFACE TEMP. INCREASE VERSUS POWER LOADS / DERATING CURVES



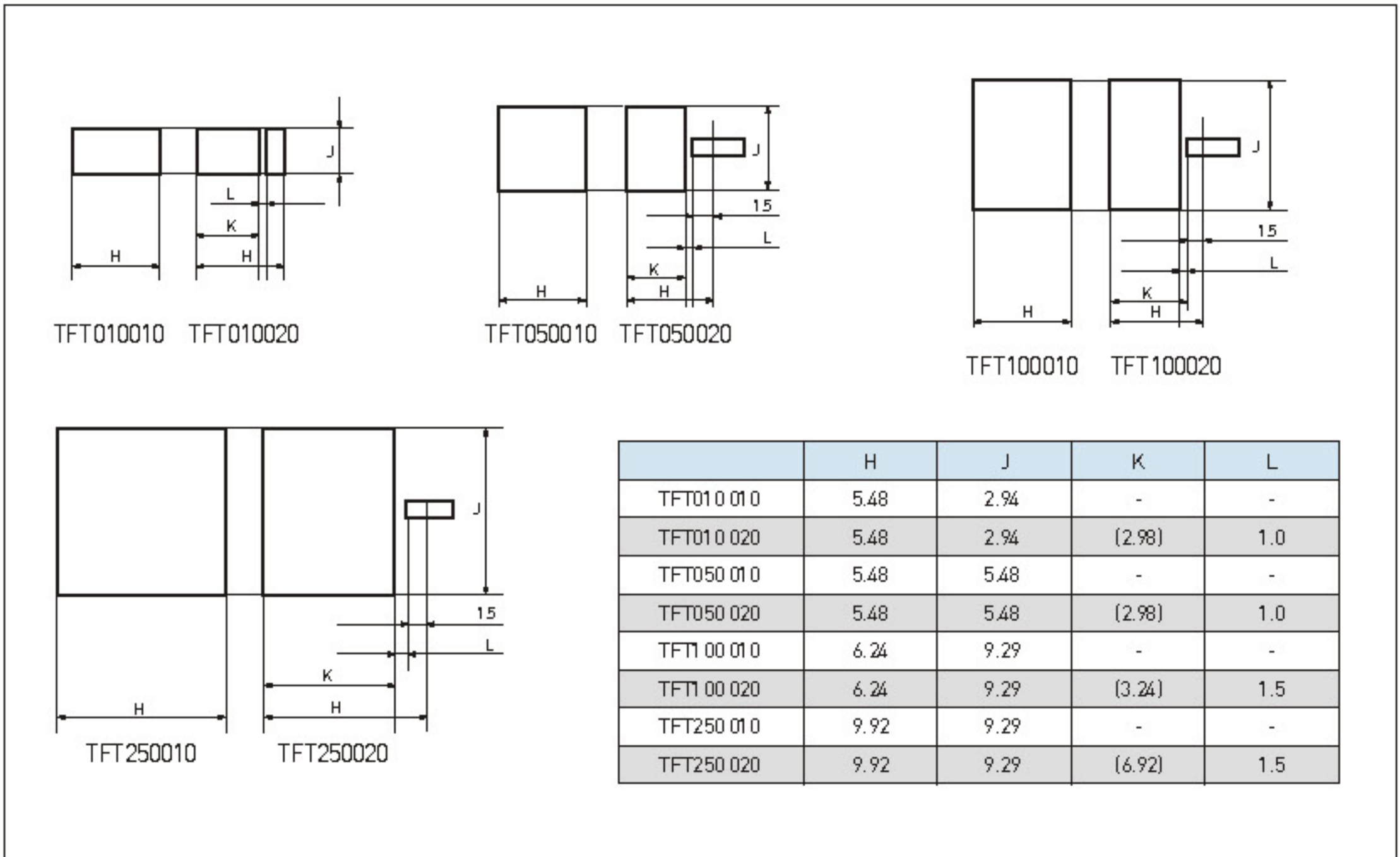
Note.
 (1) Other resistance value and substrate thickness are available. Please consult RARA factory.
 (2) Power rating assumes that chip attached on metal plate.
 (3) Solder joint design should assure a solder thickness within 50 micron meters.

DIMENSIONS(mm)

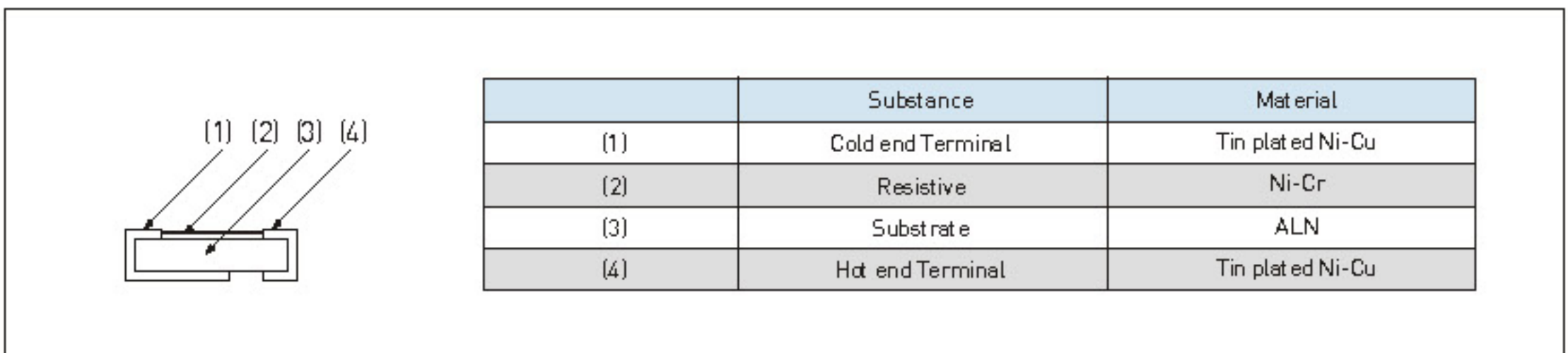


Type	Power	A	B	C	D	E	F	G
TFT010 010	10W	5.08	2.54	1.05	2.34	-	1.27	1.27
TFT010 020		5.08	2.54	1.05	2.30	2.54	1.27	1.27
TFT050 010	50W	5.08	5.08	1.05	4.84	-	1.27	1.27
TFT050 020		5.08	5.08	1.05	4.84	2.54	1.27	1.27
TFT100 010	100W	5.84	8.89	1.05	8.49	-	1.27	1.27
TFT100 020		5.84	8.89	1.05	8.49	6.35	1.27	1.27
TFT250 010	250W	9.52	9.52	1.05	9.12	-	1.27	1.27
TFT250 020		9.52	9.52	1.05	9.12	6.98	1.27	1.27

FOOT PATTERN DESIGN



MATERIALS



ORDERING PROCEDURE EXAMPLE

Ordering P/N	Type	Outlook	TC	Resistance	Tolerance	Bulk/Tape	Remarks
TFT01 001 0C50 2FZ00	TFT010	010	C	50 Ω	F	Z00-Z01	Bulk-Tape
TFT01 0020C50 2FZ00	TFT010	020	C	50 Ω	F	Z00-Z01	Bulk-Tape
TFT050 01 0C50 2FZ00	TFT050	010	C	50 Ω	F	Z00-Z01	Bulk-Tape
TFT050 01 0C50 2FZ00	TFT050	020	C	50 Ω	F	Z00-Z01	Bulk-Tape
TFT1 00 01 0C50 2FZ00	TFT100	010	C	50 Ω	F	Z00-Z01	Bulk-Tape
TFT1 00 020C50 2FZ00	TFT100	020	C	50 Ω	F	Z00-Z01	Bulk-Tape
TFT250 01 0C50 2FZ00	TFT250	010	C	50 Ω	F	Z00-Z01	Bulk-Tape
TFT250 020C50 2FZ00	TFT250	020	C	50 Ω	F	Z00-Z01	Bulk-Tape