



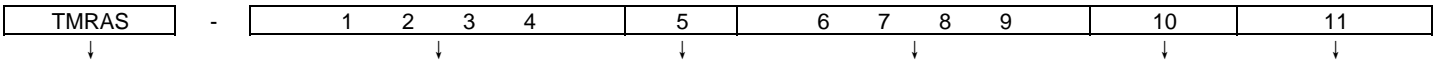
TMRAS-Alloy Shunt Resistors-ASR series

Feature:

Resistance values down to 0.0002 ohms
 Welded Construction
 Flameproof
 Low Inductance
 Lead-Free

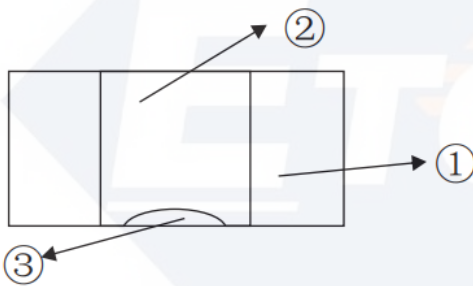
Application: Frequency modules, Communication system, Power modules

Part Number:



Produce Code TMRAS: Alloy Shunt Resistors-ASR series	Resistance Value Code Three digits: The first two digits are significant figures and the third one denotes number of zeros. 394=390K Ω Four digits: The first three digits are Significant figures and the fourth one denotes number of zeros. 1201=1.2K Ω	Tolerance F=±1% G=±2% J=± 5%	Size: 2512 3920 5930	Material: M: Manganin K: Kama	Packaging T: tape&reel B: bulk

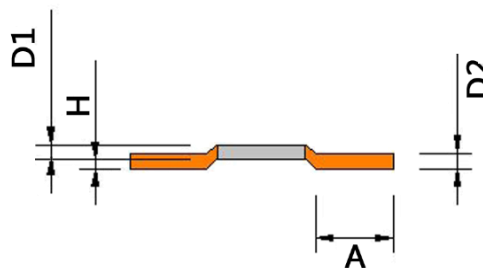
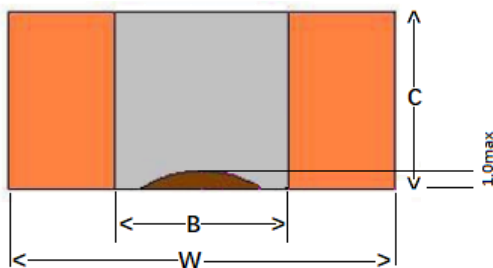
Construction:



No.	Construction
①	Elicited End
②	Alloy Material
③	Trimming Arca

Dimensions:

Type	Size	Power	B	W	A	C	H
TMRAS-2512	2512	3W	3.0±0.3	6.3±0.2	1.2±0.2	3.1±0.3	0.5±0.1
TMRAS-3920	3920	5W	4.5±0.3	10±0.2	2.2±0.2	5.1±0.4	0.5±0.1
TMRAS-5930	5930	7W	5.1±0.3	15±0.3	4.2±0.3	7.6±0.4	0.5±0.1

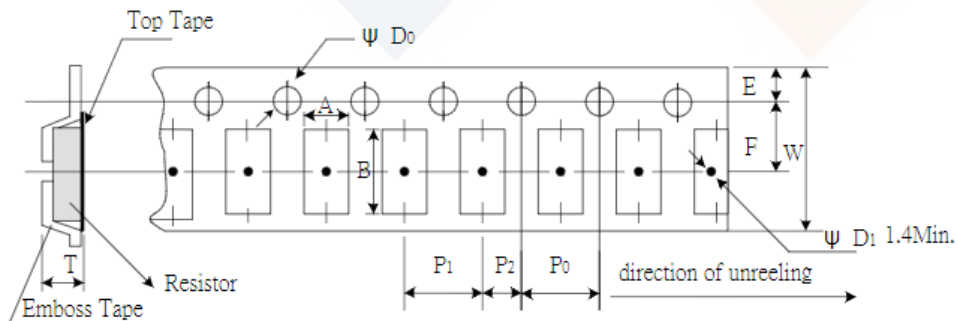


Type	Resistance(Ω)	Power(W)	D1(mm)	D2(mm)
M-3	0.0003	3	1.5	1.5
	0.0005	3	0.85	0.85
	0.001	3	0.5	0.5
K-3	0.003	3	0.43	0.43
M-5	0.0003	5	1.35	1.35
	0.0005	5	0.81	0.81
K-5	0.001	5	1.22	1.22
	0.003	5	0.41	0.41
	0.004	5	0.28	0.28
M-7	0.0002	7	1.5	1.5
	0.0005	7	0.6	0.6
K-7	0.001	7	0.86	0.86
	0.003	7	0.31	0.31

Performance

Test	Conditions of test	Test limits
Thermal Shock	-55°C to 150°C, 1000 cycles, 15 min at each extreme	$\pm(1.0\%+0.0005\Omega)\Delta R$
Shot time overload	5 x rated power for 5s	$\pm(0.5\%+0.0005\Omega)\Delta R$
Low temperature storage	-65°C for 45 min	$\pm(0.5\%+0.0005\Omega)\Delta R$
High temperature exposure	1000h at +170°C	$\pm(1.0\%+0.0005\Omega)\Delta R$
Bias humidity	+85°C, 85% RH, 10% bias, 1000h	$\pm(0.5\%+0.0005\Omega)\Delta R$
Mechanical	1000g's for 6ms, 5 pulses	$\pm(0.5\%+0.0005\Omega)\Delta R$
Vibration	Frequency varied 10 Hz to 200Hz in 1 min, 3 directions, 12h	$\pm(0.5\%+0.0005\Omega)\Delta R$
Load life	1000h at +70°C, 1.5h "ON", 0.5h "OFF"	$\pm(1.0\%+0.0005\Omega)\Delta R$
Resistance to solder heat	+260°C solder, 10s to 12s dwell, 25mm/s emergence	$\pm(0.5\%+0.0005\Omega)\Delta R$
Moisture resistance	MIL-STD-202, method 106, 0% power, 7a and 7b not required	$\pm(0.5\%+0.0005\Omega)\Delta R$

Embossed Plastic Tape Specifications



Dimensions	A	B	W	E	F	P0	P1	P2	D0	T
2512	4.3	7.6	16	1.55	7.5	3.85	7.7	7.7	1.5	1.7
3920	6	11	24	1.55	11.2	6	12	12	1.5	2
5930	8.6	16	24	1.55	10.8	6	12	12	1.5	2.4