

Content Data IMS TPI Series Resistors – Lead Free (PbF) Terminations
(TPI-0402, TPI-0603, TPI-0805)

Construction	Material	Substance
Substrate	Ceramic	Al ₂ O ₃
Resistor	Nichrome alloy	NiCr
Protective Coating	Epoxy	Polyimide resin coating
Marking	Copper plating	Epoxy
Inner Termination	Plating (Ni)	Ni
Outer Termination	Plating (Sn)	Sn

Substance			TPI-0402	TPI-0603	TPI-0805
Name	Symbol	CAS No.	weight %	weight %	weight %
Nickel	Ni	7440-02-0	4.845	3.150	3.043
Tin	Sn	7440-31-5	4.210	2.700	2.608
Nichrome	NiCr	12605-70-8	0.089	0.010	0.029
Alumina	Al ₂ O ₃	1344-28-1	89.21	92.34	92.50
Epoxy			0.296	0.350	0.384
Polyimide resin coating			1.350	1.450	1.436
	reference weight (mg)		0.67	2.00	3.90