



**Ferrite Cores & Magnet Applications** are SMD style power devices that utilize **EPO-TEK®** adhesives in two areas: one is a **dielectric epoxy** for bonding and insulating the Copper (Cu) coil winding and the other for creating a **strong adhesive bond** in ferrite (magnets) cores. Many times, the same structural grade type of material can be used in both of these areas, however lower modulus is required to avoid any ferrite cracking. Other desired properties include: ease of automation, high temperature resistance, high Tg, fast cure and easily dispensed.

SMD power devices can consist of: power IC semiconductors, transformer casings, inductor coils and motor products for the power electronics industry, excluding wind and solar markets.

	EPO-TEK	NO. of COMPONENTS	COLOR Before/After CURE (thin film)	CURE TEMPERATURE (minimal)	VISCOSITY @ 23°C	GLASS TRANSITION TEMPERATURE (Tg)	DIE SHEAR STRENGTH @ RT (80mil x 80mil)	INDEX OF REFRACTION (Nd)	SPECTRAL TRANSMISSION	TGA DEGRADATION TEMPERATURE	CTE Below Tg/ Above Tg (in/in/°C)	POT LIFE (@ room temp.)	SHELF LIFE (@ room temp.)
FERRITE CORES	353ND	Two	Amber/Dark Red	150°C – 1 min 80°C – 30 min	3,000-5,000 @ 50 rpm	≥90°C	≥15 kg/5,100 psi	1.5694	>50% @ 550 nm >98% @ 800-1000 nm >95% @ 1100-1600 nm	412°C	54 x 10 <sup>-6</sup> 206 x 10 <sup>-6</sup>	≤3 hours	1 year
	353ND-T	Two	Tan / Dark Red	150°C – 1 min 80°C – 30 min	9,000-15,000 @ 20 rpm	≥90°C	≥15 kg/5,100 psi	N/A	N/A	409°C	43 x 10 <sup>-6</sup> 231 x 10 <sup>-6</sup>	3 hours	1 year
	T7109	Two	White/White	150°C – 10 min 80°C – 8 hours	14,000-20,000 @ 20 rpm	≥45°C	≥15 kg/5,100 psi	N/A	N/A	377°C	46 x 10 <sup>-6</sup> 239 x 10 <sup>-6</sup>	4 hours	1 year
	930-4	Two	Ivory/Amber	150°C – 10 min 80°C – 6 hours	12,000-17,000 @ 20 rpm	≥90°C	≥15 kg/5,100 psi	N/A	N/A	425°C	27 x 10 <sup>-6</sup> 136 x 10 <sup>-6</sup>	24 hours	1 year
CU COIL WINDINGS	353ND	Two	Amber/Dark Red	150°C – 1 min 80°C – 30 min	3,000-5,000 @ 50 rpm	≥90°C	≥15 kg/5,100 psi	1.5694	>50% @ 550 nm >98% @ 800-1000 nm >95% @ 1100-1600 nm	412°C	54 x 10 <sup>-6</sup> 206 x 10 <sup>-6</sup>	≤3 hours	1 year
	360	Two	Amber/Dark Amber	150°C – 1 min 100°C – 10 min	350-550 @ 100 rpm	≥90°C	≥10 kg/3,400 psi	1.5345	>97% @ 700-1600 nm >88% @ 600 nm >51% @ 500 nm	375°C	39 x 10 <sup>-6</sup> 175 x 10 <sup>-6</sup>	6 hours	1 year
	377	Two	Amber/Dark Amber	150°C – 1 hour	150-300 @ 100 rpm	≥95°C	≥10 kg/3,400 psi	1.5195	>99% @ 600 nm >95% @ 1000-1500 nm	375°C	57 x 10 <sup>-6</sup> 210 x 10 <sup>-6</sup>	24 hours	1 year
PLASTIC IC PACKAGING	TD1001	One	White/Ivory	125°C – 1 hour	10,000-22,000 @ 5 rpm	≥40°C	≥15 kg/5,100 psi	N/A	N/A	436°C	57 x 10 <sup>-6</sup> 213 x 10 <sup>-6</sup>	28 days	1 year @ -40°C
	TV2001	Two	Yellow/Brown	160°C – 5 min 80°C – 90 min	10,000-20,000 @ 20 rpm	≥35°C	≥15 Kg/5,100 psi	N/A	N/A	466°C	67 x 10 <sup>-6</sup> 189 x 10 <sup>-6</sup>	2 days	1 year
	OD1001	One	Cream/Amber Cream	125°C – 1 hour	1,000 - 1,500 @ 100 rpm	>35°C	≥15 Kg/5,100 psi	1.5413	<50% @ 300-1,200 nm	355°C	66 x 10 <sup>-6</sup> 211 x 10 <sup>-6</sup>	28 days	1 year @ -40°C
TRANSFORMER POTTING	T905-BN3	Two	Grey/Grey	80°C – 2 hours	2,000-7,000 @ 50 rpm	≥40°C	≥10 kg/3,400 psi	N/A	N/A	347°C	37 x 10 <sup>-6</sup> 151 x 10 <sup>-6</sup>	3 hours	1 year
	T905-BN4	Two	Light Grey/Grey	80°C – 1 hour 23°C – 1 day	12,000-18,000 @ 20 rpm	≥50°C	>5 kg/1,700 psi	N/A	N/A	350°C	24 x 10 <sup>-6</sup> 120 x 10 <sup>-6</sup>	1 hour	1 year
GENERAL POTTING	T905-1	Two	Grey/Grey	80°C – 1 hour 23°C – 1 day	6,000-13,000 @ 20 rpm	≥40°C	≥15 kg/5,100 psi	N/A	N/A	346°C	25 x 10 <sup>-6</sup> 130 x 10 <sup>-6</sup>	30 mins	1 year
	T7110	Two	Grey/Grey	150°C – 15 min 23°C – 3 days	1,400-2,200 @ 100 rpm	≥40°C	≥10 kg/3,400 psi	N/A	N/A	314°C	31 x 10 <sup>-6</sup> 142 x 10 <sup>-6</sup>	3.5 hours	1 year
	730 UNF	Two	Yellow/Yellow	100°C – 30 min 23°C – 24 hours	8,000-12,000 @ 20 rpm	≥50°C	≥10 kg/3,400 psi	1.5275	>95 % @ 480-1640 nm	343°C	61 x 10 <sup>-6</sup> 192 x 10 <sup>-6</sup>	1 hour	1 year
	301-2	Two	Clear/Colorless	80°C – 3 hours 23°C – 2 days	225-425 @ 100 rpm	>80°C	>15 kg/5,100 psi	1.5318	>99% @ 400-1200 nm >98% @ 1200-1600 nm	360°C	61 x 10 <sup>-6</sup> 180 x 10 <sup>-6</sup>	8 hours	1 year

N/A - not applicable, as these are filled systems



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