

Low-Temperature Sealing

Ferro's line of low-temperature sealing glasses are comprised of lead-borate (vitreous) and lead-zinc-borate crystallizing glasses formulated to meet specific thermal expansion requirements. Uses include hermetic and compression sealing of IC packages, plasma displays, CRTs, ferrites, fiber optics, as well as other ceramic, metal and glass substrate materials.

VITREOUS, COMPOSITES	THERMAL EXPANSION		ANNEAL PT °C	SOFT PT °C	DENSITY g/cc	POWDER TYPE	SEALING TEMP/TIME	TYPICAL APPLICATION
	@260°C	@Set Pt.						
EG 2759	5.0*	8.0*	350	350	4.58	VEG	600°C/15 min.	Fused Silica
EG 2805	33.0*	38.0*	350	350	4.15	VEG	575°C/15 min.	Pyrex, Silicon
EG 2000	48.0*	53.0*	335	350	4.34	VEG	500°C/15 min.	AlN, Kovar
EG 2004	66.5*	71.0*	315	350	5.22	VEG	425°C/15 min.	Alumina, CERNIP
EG 2012	74.0*	79.0*	315	350	5.44	VEG	410°C/15 min.	BeO, Sapphire
EG 2020	84.0*	89.0*	315	350	5.87	VEG	390°C/15 min.	Steatite
VITREOUS								
CF 7570	84.5	94.0	376	447	5.42	VSD	530°C/15 min.	Ti, Dumet
CF 7555	87.0	100.0	370	415	5.70	VSD, TF	460°C/15 min.	Ferrites
CF 1417	87.0	96.0	356	427	5.60	VSD	490°C/15 min.	Ferrites
CF 8463	102.0	108.0	333	388	6.22	VSD, VWG	450°C/15 min.	Ferrites, Inconel
CF 7567	113.0	120.0	303	358	6.68	TF	420°C/15 min.	1010 Steel, 400SS
DIVITRIFYING								
CF 7578	58.0*	61.0*	-	445	5.78	VSD	530°C/60 min.	Alumina, Optics
CF 7586	60.0*	62.0*	430	513	5.04	TF	600°C/30 min.	Alumina
CF 7583	82.0*	82.0*	-	372	6.08	TF	480°C/5 min.	Steatite
CF 7575	83.0*	89.0*	-	370	6.20	VSD, TF	450°C/60 min.	Soda Lime/Pt
CF 7572	92.0*	95.0*	315	370	6.35	VSD, TF	450°C/60 min.	Pt

* Fired Thermal Expansion

Powder Types

TYPE	D50	DMAX
VSD	>16µm	75µm
VEG, TF	10-16µm	75µm
VWG	3.5µm	25µm