

FZ-3805

- **Out line:** FZ-3805 is glass fiber and mineral filled PPS compound which provides dimensional stability and low warp needed for DVD optical pick up.
- **Color:** Black

Engineering Properties of FZ-3805

Properties	Test Method	Unit	FZ-3805
General Information		<ASTM>	GF & Filler
Physical			
Specific gravity	D-792	-	2.00
Water absorption, 23deg. /24Hrs. /in water	D-570	Wt. %	0.02
Mold shrinkage, MD /TD ^a	D-955	%	0.25/0.85
Mechanical			
Tensile strength	D-638	MPa	105
Tensile modulus	D-638	MPa	17000
Tensile elongation at break	D-638	%	0.9
Poisson's ratio	-	-	0.35
Flexural strength	D-790	MPa	165
Flexural modulus	D-790	MPa	16000
Flexural elongation at break	D-790	%	1.4
Izod impact strength	D-256	J/m	
notched / un notched			50/230
Compressive strength	D-695	MPa	150
Rockwell hardness, R/M	D-785	-	121/100
Coefficient of friction ^b , static /dynamic	-	-	0.36/0.35
Thermal			
Distortion temp. of under load, 1.82MPa	D-648	°C	265
Coefficient of thermal expansion ^c , -30 to 90°C	D-696	m/mK	1.8x10 ⁻⁵
UL Flammability ^d , t~0.8mm	UL-94	-	V-0
Electrical			
Dielectric strength, t=1.6mm	D-149	kv/mm	16
Dielectric constant, 1MHz	D-150	-	5
Dissipation factor, 1MHz	D-150	-	0.007
Comparative tracking index (CTI)	D-3638	Volt	-
Arc resistance	D-495	sec.	160
Volume resistibility	D-257	Ohm.cm	10 ¹⁶
Process Conditions			
Cylinder temperature	-	°C	300-340
Mold temperature	-	°C	120-150

a: MD; Mold direction, TD; Transverse direction, b: P=150KPa, V=0.3m/s, PPS vs. carbon steel,
c: Average value of MD & TD, d: UL file No. E53829



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