

## Z-240-DS Black

■ **Out line:** Z-240-DS Black is a 40% glass fiber reinforced polyphenylene sulfide compound that is Super-Tough type with good process ability.

■ **Color:** Black

### Engineering Properties of Z-240-DS Black

Properties	Test Method	Unit	Z-240-DS Black
General Information			GF40%
	<ASTM>		
<b>Physical</b>			
Specific gravity	D-792	-	1.64
Water absorption, 23deg. /24Hrs. /in water	D-570	Wt.%	0.02
Mold shrinkage, MD /TD <sup>a</sup>	D-955	%	0.25/1.1
<b>Mechanical</b>			
Tensile strength	D-638	MPa	180
Tensile modulus	D-638	MPa	-
Tensile elongation at break	D-638	%	2.1
Poisson's ratio	-	-	-
Flexural strength	D-790	MPa	255
Flexural modulus	D-790	MPa	12000
Flexural elongation at break	D-790	%	2.8
Izod impact strength notched / un notched	D-256	J/m	120/700
Compressive strength	D-695	MPa	-
Rockwell hardness, R/M	D-785	-	-/-
Coefficient of friction <sup>b</sup> , static /dynamic	-	-	-/-
<b>Thermal</b>			
Distortion temp. of under load, 1.82MPa	D-648	°C	260
Coefficient of thermal expansion <sup>c</sup> , -30 to 90°C	D-648	m/mK	2.0x10 <sup>-5</sup>
UL Flammability <sup>d</sup>	UL-94	-	V-0 <sup>e</sup>
<b>Electrical</b>			
Dielectric strength, t=1.6mm	D-149	kv/mm	16
Dielectric constant, 1MHz	D-150	-	-
Dissipation factor, 1MHz	D-150	-	-
Comparative tracking index (CTI)	D-3638	Volt	-
Arc resistance	D-495	sec.	-
Volume resistibility	D-257	Ohm.cm	10 <sup>16</sup>
<b>Process Conditions</b>			
Cylinder temperature	-	°C	290-330
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, e: t~0.8mm