



## 1. Feature

- 1.1 Applied in across-the-line, line-to-ground, and line-by-pass application.
- 1.2 Certified to meet demanding X&Y type worldwide safety agency requirements, based on IEC384-14 3<sup>ND</sup> edition.
- 1.3 Disc ceramic capacitors with epoxy coating (Blue color).
- 1.4 Flame-resistant outer insulation (UL94V-0)
- 1.5 RoHS compliance.

## 2. Standard Recognition

Country		Standard	Rated Voltage	Certificate number	Climate Category
UL USA		UL1414 FOWX2	250VAC	E104572	
UL CANADA		UL1414 FOWX8			
CSA Canada		CAN/CSA-E384-14-95	250VAC	1413193 (LR66829)	
VDE Germany		EN 60384-14(0565-1)2006-04 EN60384-14 2005-08 IEC 60384-14 ED3	X1: 760/400 VAC Y2: 500/250 VAC	115455	55/125/21
ENEC (Table A)		EN 60384-14(0565-1)2006-04 EN60384-14 2005-08 IEC 60384-14 ED3	X1: 760/400 VAC Y2: 500/250 VAC	40016157	55/125/21
CQC China		GB/T14472-1998	X1: 400 VAC Y2: 250 VAC	CQC03001008379	

**Table A – ENEC Signatories**Please refer to [http://www.eepca.org/affiche\\_cbgroup.php?typ=1&soc=4](http://www.eepca.org/affiche_cbgroup.php?typ=1&soc=4)

AENOR (Spain)	MEEI (Hungary)
ASTABEAB (United kingdom)	NEMKO (Norway)
BSI (United kingdom)	SGS Belgium (Belgium)
CERTIF (Portugal)	SGS FIMKO (Finland)
ELECTROSUISEE (Switzerland)	SIQ (Slovenia)
ELOT (Greece)	SNCH (Luxembourg)
EZU (Czech Republic)	TRPS (Germany)
IMQ (Italy)	TUV SUD PS (Germany)
Intertek Semko (Sweden)	U Int DEMKO (Demark)
KEMA (Netheriands)	VDE (Germany)
LCIE (France)	OVE (Austria)



### 3. Marking & Mechanical Drawing

Ex:



Series: WD

Capacitance: 102(1000PF)

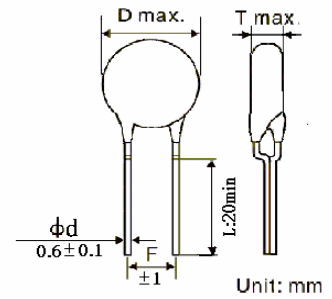
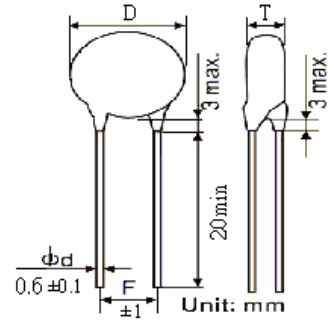
Tolerance: M ( $\pm 20\%$ )

Trademark: **W**

Rated Voltage: 250V~, 400V~

Sub-class: Y1, X1

Safety mark:  



REMARK:



**Part Number Configuration :**

WD B 33P K Y1

(1) (2) (3) (4) (5)

(1) AC capacitors, safety

(2) Type code: B(Y5P) F (Y5V)

(3) Rated capacitance

(4) Tolerance on rated capacitance

(5) Class Y1

**4.Product List and Dimensions**

Welson Part Number	T.C.	Capacitance (PF) & Tolerance		D	T	F	Remark for customer approval	
				max	max	±1.0	Lead Spec. & Packing	Customer part number & Notes
				Unit: mm				
WD B 101K Y1	B (Y5P)	100 PF	±10%	10	8	10		
WD B 101M Y1		100 PF	±20%	10	8			
WD B 151K Y1		150 PF	±10%	10	8			
WD B 151M Y1		150 PF	±20%	10	8			
WD B 221K Y1		220 PF	±10%	10	8			
WD B 221M Y1		220 PF	±20%	10	8			
WD B 331K Y1		330 PF	±10%	10	8			
WD B 331M Y1		330 PF	±20%	10	8			
WD B 471K Y1		470 PF	±10%	10	8			
WD B 471M Y1		470 PF	±20%	10	8			
WD B 681K Y1		680 PF	±10%	11	8			
WD B 681M Y1		680 PF	±20%	11	8			
WD B 102M Y1	F (Y5V)	1000 PF	±20%	11	8			
WD B 152M Y1		1500 PF	±20%	14	8			
WD B 222M Y1		2200 PF	±20%	14	8			
WD B 272M Y1		2700 PF	±20%	14	8			
WD B 332M Y1		3300 PF	±20%	16	8			
WD B 392M Y1		3900 PF	±20%	17	8			
WD B 472M Y1		4700 PF	±20%	19	8			



## 5. Performance

1	Capacitance Tolerance	J: $\pm 5\%$ , K: $\pm 10\%$ , C: $\pm 0.25\text{pF}$ , D: $\pm 0.5\text{pF}$ , M: $\pm 20\%$ at 25°C, 1KHz 1Vrms max.
2	Dissipation Factor (D.F.)	2.5% max. (T.C.: SL, COG, X7R, B, E) 5.0% max. (T.C.: F)
3	Insulation Resistance	10000 M $\Omega$ min. at 500v $\pm 50\text{V}$ DC for 1 minute
4	Dielectric Strength	4000V AC for 60 seconds 50Hz or 60Hz
5	Working Temperature Range	-25°C to 125°C
6	Temperature Characteristic	COG: $\pm 60$ ppm/°C, SL: +350 ~ -1000 ppm/°C X7R: $\pm 15\%$ , B: $\pm 10\%$ , E: +20% ~ -55%, F: +30% ~ -85% Between -25°C ~ +85°C
7	Operating Voltage	250VAC / 400VAC