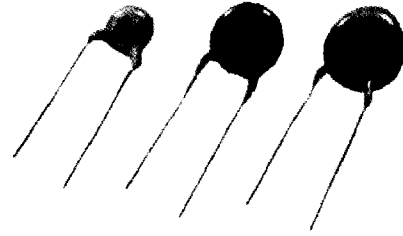


**Features**

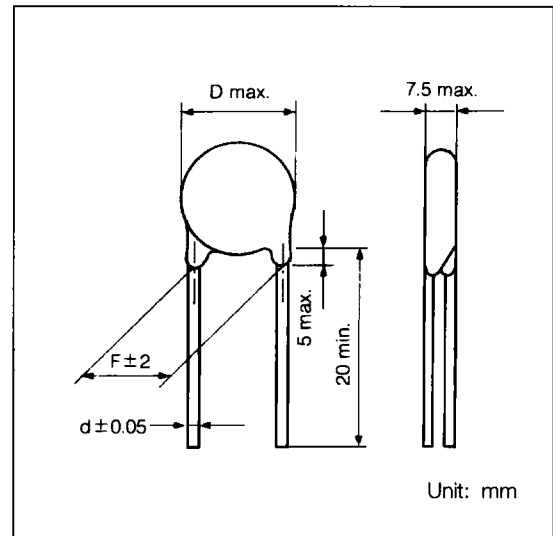
- Ceramic Disc Capacitors, Type NS, are recognized by UL, CSA, BSI, SEMKO, SEV and VDE
- The NS (Suffix: X) capacitors are applicable to "Class II" equipment in European safety regulations



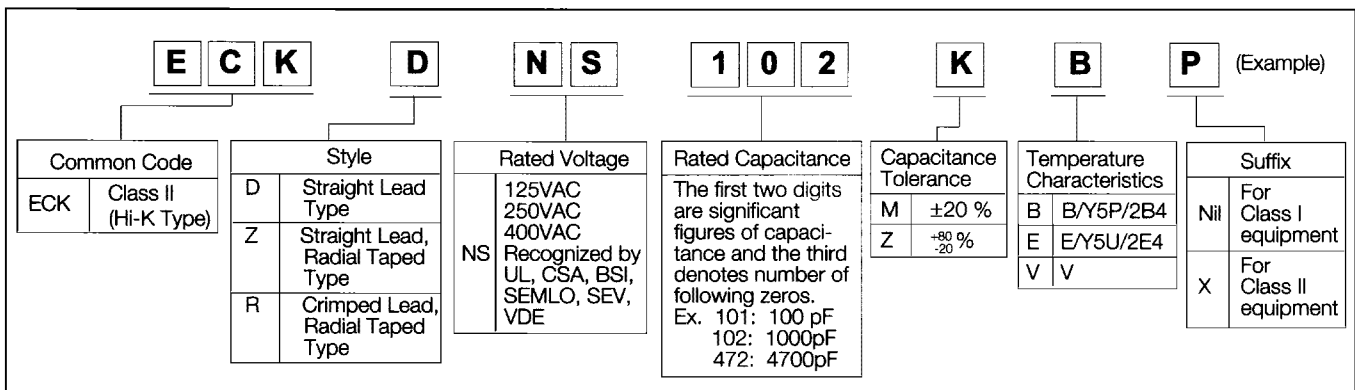
**Specifications (Type NS)**

Characteristics	Specifications		
Operating Temperature Range	-25 to 85 °C		
Rated Voltage	Applicable Standards	Rated Voltage	
	UL, CSA	125 VAC	
	VDE (565-1)	250 VAC	
	VDE (560-2), SEV, BS, SEMKO	400 VAC	
Dielectric Withstanding Voltage	[For Class II equipment] 4000 VAC, 1 min.		
	[For Class I equipment] 2600 VAC, 1 min.		
	Notes: [T.C. E, 10000 pF] 2000 VAC, 1 min. [T.C. V] 2500 VAC, 1 min.		
Capacitance	Within the specified tolerance, when measured at 1 kHz, 1 to 5 Vrms and 20 °C		
Dissipation Factor	B/Y5P/2B4, E/Y5U/2E4: 2.5% max. V: 5.0% max. When measured at 1 kHz, 5Vrms max. and 20 °C		
Insulation Resistance	10000 MΩ min. at 500 VDC, 1 minute		
Temperature Characteristics (see page 68)	T.C.	Cap. Change	Temp. Range
	B/Y5P/2B4	±10 % max.	-25 to 85 °C
	E/Y5U/2E4	±20 % max.	-25 to 85 °C
	V	±30 % max.	0 to 70 °C
	●The reference temperature: 20 °C		

**Dimensions**



**Explanation of Part Numbers**



**Related Standards and Certificate Numbers**

Related Standard			Certificate Number	T.C.	Cap. Range (Applicable)
UL	(USA)	UL1414	E62674	B/E/V	100~22000 pF
CSA	(Canada)	CSA C22.2	LR31605	B/E/V	100~22000 pF
VDE	(Germany)	VDE 560-2*	32543	B	100~1000 pF
			35912	E	1500~4700 pF
			32543	V	4700~22000 pF
		VDE 565-1*	32544	B	100~1000 pF
			35912	E	1500~4700 pF
SEV	(Switzerland)	SEV 1016**	90,102655,11	B/E	100~4700 pF
		SEV1055 X**	90,102655,12	E	10000pF
BSI	(UK)	BS 415	415226319	B/E/V	100~22000pF
SEMKO	(Sweden)	SEMKO 101	8372418	B/E/V	100~22000 pF

Notes: \*VDE 560-2: For coupling use

\*\*SEV 1016: For protection from electric shock

VDE 565-1: For radio interference suppressor

SEV 1055: For radio interference suppressor

**Standard Products (Type NS)**

Part Number	Capacitance		T.C.	Dimensions (mm)			Applicable standards						
	Rated Cap. (pF)	Tol. (%)		D max.	F	d	UL	CSA	VDE		SEV	BS	SEMKO
									560-2	565-1			
ECKDNS101MBX	100	±20	B	11.0	10.0	0.65	○	○	●	●	●	●	●
ECKDNS221MBX	220	±20	B	11.0	10.0	0.65	○	○	●	●	●	●	●
ECKDNS471MBX	470	±20	B	11.0	10.0	0.65	○	○	●	●	●	●	●
ECKDNS102MBX	1000	±20	B	11.0	10.0	0.65	○	○	●	●	●	●	●
ECKDNS152MEX	1500	±20	E	11.0	10.0	0.65	○	○	●	●	●	●	●
ECKDNS222MEX	2200	±20	E	11.0	10.0	0.65	○	○	●	●	●	●	●
ECKDNS332MEX	3300	±20	E	13.0	10.0	0.65	○	○	●	●	●	●	●
ECKDNS472MEX	4700	±20	E	16.0	10.0	0.65	○	○	●	●	●	●	●
ECKDNS101MB	100	±20	B	10.5	7.5	0.65	○	○	○	○	○	○	○
ECKDNS221MB	221	±20	B	10.5	7.5	0.65	○	○	○	○	○	○	○
ECKDNS471MB	470	±20	B	10.5	7.5	0.65	○	○	○	○	○	○	○
ECKDNS102MB	1000	±20	B	10.5	7.5	0.65	○	○	○	○	○	○	○
ECKDNS152ME	1500	±20	E	10.5	7.5	0.65	○	○	○	○	○	○	○
ECKDNS222ME	2200	±20	E	10.5	7.5	0.65	○	○	○	○	○	○	○
ECKDNS332ME	3300	±20	E	13.0	10.0	0.65	○	○	○	○	○	○	○
ECKDNS472ME	4700	±20	E	16.0	10.0	0.65	○	○	○	○	○	○	○
ECKDNS103ME	10000	±20	E	22.0	10.0	0.80	○	○	—	—	—	○	○
ECKDNS472ZV	4700	+80, -20	V	12.0	7.5	0.65	○	○	○	—	—	○	○
ECKDNS103ZV	10000	+80, -20	V	17.5	10.0	0.65	○	○	○	—	—	○	○
ECKDNS223ZV	22000	+80, -20	V	24.0	10.0	0.80	○	○	○	—	—	○	○

Notes: ○ for Class I equipment  
● for Class II equipment