

**SUBJECT : Discontinuation of Leaded NS-B, RS, and GL Series of Ceramic Disc Capacitors  
Sub-Class Y2, X1 Noise Suppression / 'Safety' Capacitors**

**BULLETIN # : DN.PG33.082002-1**

**DATE : August 20, 2002**

**REASON FOR CHANGE :**

Reducing the number of types offered and offering an alternative which meets the latest standards

**EFFECTIVE DATE : January 1, 2003**

**LAST-TIME ORDER**

**LAST-TIME SHIPMENT**

ECKxRSxxxxxY	Already discontinued	Already discontinued
ECKxGLxxxxx	September 30, 2002	December 31, 2002
ECKxNBxxxx	September 30, 2002	December 31, 2002

**SUGGESTED REPLACEMENT / ALTERNATIVE: TS Series, ECK-xTSxxxxx**

**OTHER DETAILS :**

Below is a comparison of the Standards, Rated Voltages, and Temperature Ranges

<u>Organization</u>	<u>Standard</u>	<u>Sub-Class</u>	<u>Rated Voltage</u>	<u>Temperature Range</u>
<b>NS-B, RS, and TS Series:</b>				
BSI	BSI 415, 1994	Y2 / X1	for NS-B / RS: Y2 is 125 Vac X1 is 400 Vac  for TS: Y2 is 250 Vac X1 is 440 Vac	for NS-B / RS: -25 to 85 °C  for TS: -25 to 125 °C
VDE	EN 132 400, 1995 ( IEC 384-14, 2 <sup>nd</sup> Ed )			
SEV				
SEMKO				
FIMKO				
NEMKO				
DEMKO				
UL	UL 1414	—	250 Vac	-25 to 85 °C
CSA	CSA C22.2, No. 1			
<b>GL Series:</b>				
UL	UL 1414	—	250 Vac	-25 to 85 °C
CSA	CSA C22.2, No. 1			

See the attached table that indicates the mechanical differences of Diameter D and Lead spacing F

Reference: LCR Marketing Group 7/08/02 Notification

Discontinuation Notice DN.PG33.082002-1.doc

Suggested TS Series Alternatives to Discontinued Ceramic Disc ECK NS-B, RS, and GL Series comparing the mechanical dimensions; Diameter (D) and Lead Spacing (F)

### Suggested Alternatives to Panasonic NS-B Series Part Numbers

Type NS-B				Type TS		
Parts No.	Diameter D	Lead Space F		Parts No.	Diameter D	Lead Space F
ECKONB101r B	10.5 max.	7.5	⇒	ECKOTS101r B	7.0 ± 1.0	7.5
ECKONB221r B	10.5 max.	7.5		ECKOTS221r B	7.0 ± 1.0	7.5
ECKONB471r B	10.5 max.	7.5		ECKOTS471r B	7.0 ± 1.0	7.5
ECKONB102r B	10.5 max.	7.5		ECKOTS102ME	7.0 ± 1.0	7.5
ECKONB152ME	10.5 max.	7.5		ECKOTS152ME	8.0 ± 1.0	7.5
ECKONB222ME	10.5 max.	7.5		ECKOTS222ME	9.0 ± 1.0	7.5
ECKONB332ME	13.0 max.	10		ECKOTS332ME	11.5 ± 1.0	7.5
ECKONB472ME	16.0 max.	10		ECKOTS472ME	14.0 ± 1.0	10

### Suggested Alternatives to Panasonic RS Series Part Numbers

Type RS				Type TS		
Parts No.	Diameter D	Lead Space F		Parts No.	Diameter D	Lead Space F
ECKORS101r BY	9.5 max.	7.5	⇒	ECKOTS101r B	7.0 ± 1.0	7.5
ECKORS221r BY	9.5 max.	7.5		ECKOTS221r B	7.0 ± 1.0	7.5
ECKORS471r BY	9.5 max.	7.5		ECKOTS471r B	7.0 ± 1.0	7.5
ECKORS102r BY	10.0 max.	7.5		ECKOTS102ME	7.0 ± 1.0	7.5
ECKORS152MEY	10.0 max.	7.5		ECKOTS152ME	8.0 ± 1.0	7.5
ECKORS222MEY	10.5 max.	7.5		ECKOTS222ME	9.0 ± 1.0	7.5
ECKORS332MEY	12.5 max.	7.5		ECKOTS332ME	11.5 ± 1.0	7.5
ECKORS472MEY	16.0 max.	10		ECKOTS472ME	14.0 ± 1.0	10

### Suggested Alternatives to Panasonic GL Series Part Numbers

Type GL				Type TS		
Parts No.	Diameter D	Lead Space F		Parts No.	Diameter D	Lead Space F
ECKOGL101MB	8.0 max.	7.5	⇒	ECKOTS101MB	7.0 ± 1.0	7.5
ECKOGL221MB	8.0 max.	7.5		ECKOTS221MB	7.0 ± 1.0	7.5
ECKOGL471MB	9.0 max.	7.5		ECKOTS471MB	7.0 ± 1.0	7.5
ECKOGL102ME	9.0 max.	7.5		ECKOTS102ME	7.0 ± 1.0	7.5
ECKOGL152ME	11.0 max.	7.5		ECKOTS152ME	8.0 ± 1.0	7.5
ECKOGL222ME	12.0 max.	7.5		ECKOTS222ME	9.0 ± 1.0	7.5
ECKOGL332ME	15.0 max.	10		ECKOTS332ME	11.5 ± 1.0	7.5
ECKOGL472ME	17.0 max.	10		ECKOTS472ME	14.0 ± 1.0	10
ECKOGL103ZV	17.0max.	10		ECKOTS103MF	16.0 ± 1.5	10

#### Notes:

- (1) O is the Lead style : A (Kinked Long Lead), N (Kinked Taping), M (Short Lead), E (Kinked short Lead), Z (Straight Type) , D (Straight Long Lead)
- (2) r is the Capacitance Tolerance: K (±10%), M (±20%)