

# Microwave SLCs

## GH/GB Series – SLC's With & Without Borders

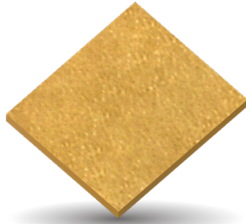
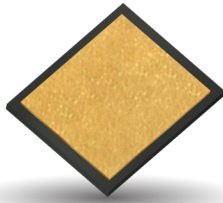
### X7S Dielectrics – Code Z



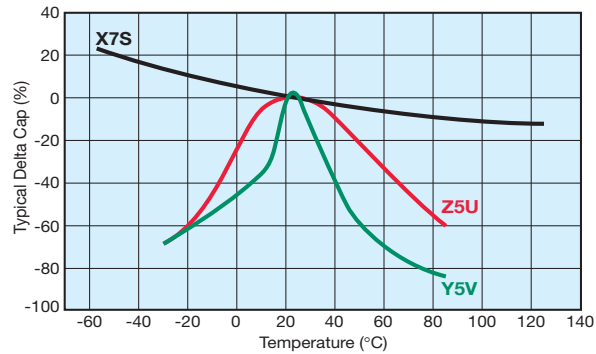
### GENERAL INFORMATION

This grain boundary barrier layer (GBBL) system was developed as a replacement for conventional Z5U/Y5V dielectrics. With X7S temperature characteristics, the Z Series offers not only a significant improvement over the TCC of these two dielectrics, but does so over a much wider operating range of -55C to +125°C. Voltage ratings of 50 and 100VDC are available.

The Z Series is offered in a range of five dielectric constants (2,500, 5,000, 9,000, 14,000 and 18,000) and products are available with & without borders.



### CAPACITANCE CHANGE WITH TEMPERATURE



Sample kits are available

[Z Dielectric KIT Catalog # KITSLCZDIESAMPL](#)

includes 10 each:

GH015Z101MA6N, GH025Z221MA6N,

GH035Z471MA6N, GH045Z102MA6N

Samples of individual P/N's are also available

DIMENSIONS: inches (millimeters)

	GH/GB01	GH/GB02	GH/GB03	GH/GB04	GH/GB05	GH/GB06
(L) Length	.015±.005 (.381±.127)	.025±.005 (.635±.127)	.035±.005 (.889±.127)	.050±.010 (1.27±.254)	.070±.010 (1.78±.254)	.090±.010 (2.29±.254)
(T) Thickness	.007±.002, -.001 (.178±.051, -.025)					
(B) Border	.002±.001 (.051±.025)					

### Z DIELECTRIC GH WITHOUT BORDERS

Cap (pF)		Cap (pF)		Cap (pF)		Cap (pF)		Cap (pF)		Cap (pF)	
Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
20	200	35	470	80	800	150	2000	300	3000	500	4700

### Z DIELECTRIC GB WITH BORDERS

Cap (pF)		Cap (pF)		Cap (pF)		Cap (pF)		Cap (pF)		Cap (pF)	
Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
20	150	30	390	70	700	140	1800	280	2700	470	4500

### HOW TO ORDER

<b>GH</b>	<b>02</b>	<b>5</b>	<b>Z</b>	<b>102</b>	<b>M</b>	<b>A</b>	<b>6N</b>	
Type Code	Case Size	Working Voltage Code	Dielectric Code	Capacitance EIA Cap Code in pF	Capacitance Tolerance Code	Termination Code	Packaging Code	
GH = w/o borders GB = w/ borders	01 02 03 04 05 06	5 = 50V 1 = 100V	Z = X7S (k = 2.5K-18K)		K = ±10% M = ±20% Z = +80% -20%	A = Au (100 μ-in min) over Ti/W (1000 Å nom) also available N = Ti/W-Ni-Au	6N = Antistatic Waffle Pack	

Note: GH/GB01 & 02 above replace GH/GB10, 15, 20 & 25 and are slightly different dimensionally. Contact factory for details.  
GH/GB03, 04, 05 & 06 replace GH/GB35, 50, 70 & 90 respectively and are dimensionally identical.



The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at [www.avx.com/disclaimer/](http://www.avx.com/disclaimer/) by reference and should be reviewed in full before placing any order.