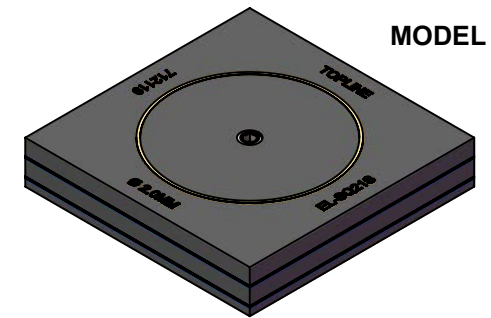


DIMENSION AND WEIGHT (MASS) TABLE

H HEIGHT ±0.5mm	PCB MASS NOM	TUNGSTEN BALLS IN CAVITY				Total PID MASS	SCREW ADJUST	SCREW HEX HEAD
		∅ DIA	Per Ball	QTY	MASS			
4.0mm	21g	1.5mm	0.031g	66~68	2.1g	5.5g	2-56	0.035
4.5mm	28g	2.0mm	0.073g	38~40	2.8g	6.0g	4-40	0.050
5.0mm	30g	2.3mm	0.102g	29~30	3.0g	6.5g	6-32	1/16
7.5mm	33g	2.5mm	0.143g	23~24	3.3g	9.0g	6-32	1/16



**U.S. PATENT 9,521,753 B1
OTHER PATENTS PENDING**

NOTES: (Unless Otherwise Specified).
1. DIMENSIONS IN mm.

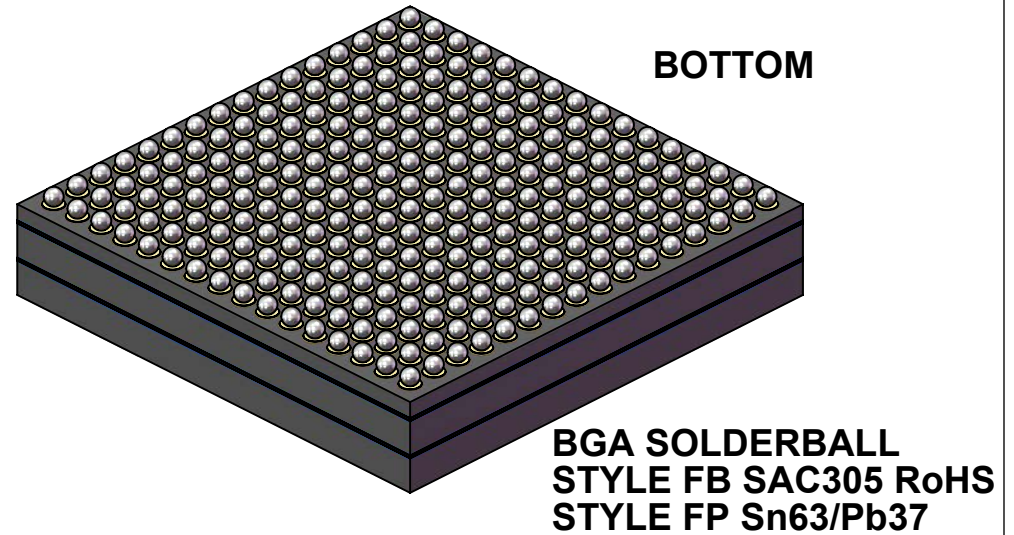
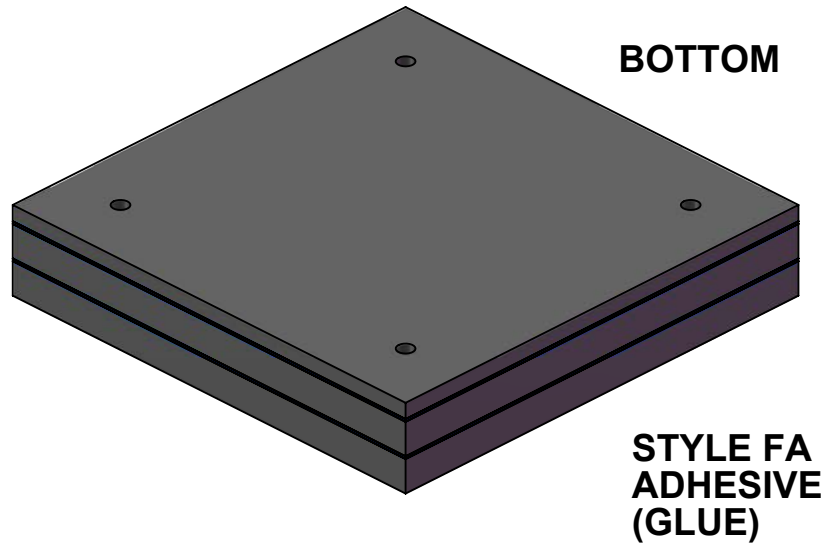
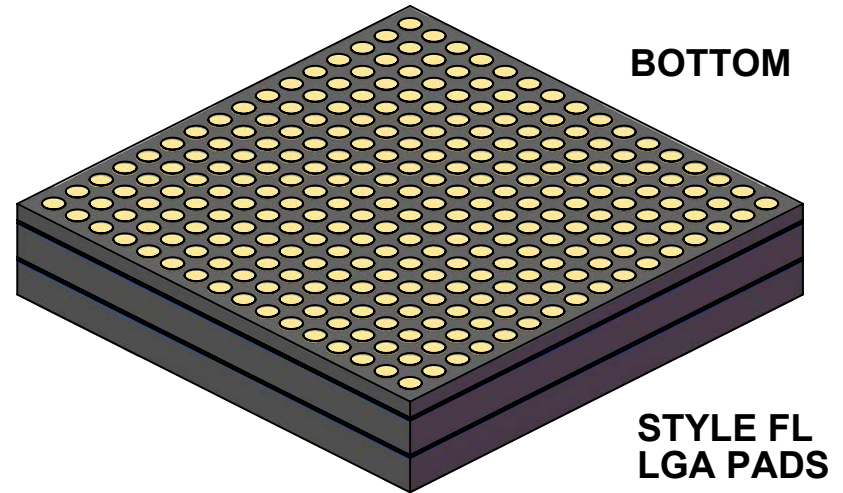
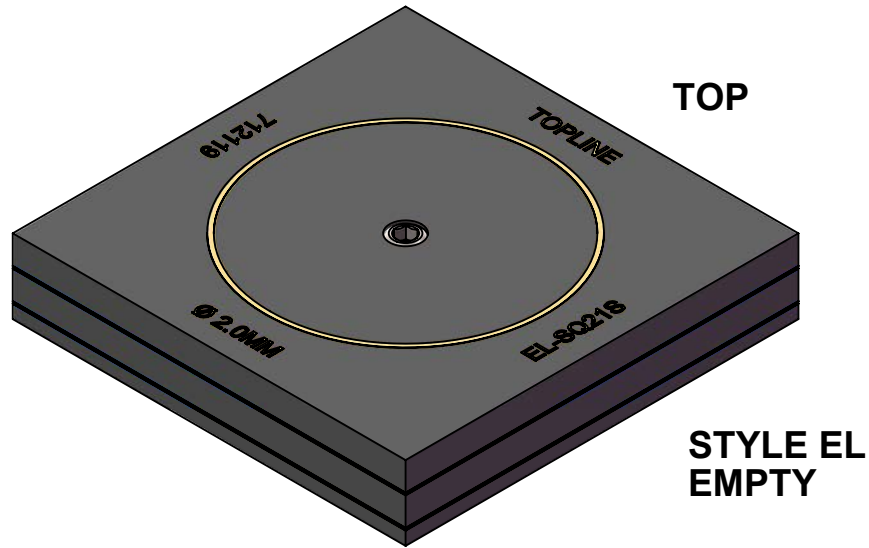
APPLICATION NOTES:
Contact TopLine for help to select
the best PID for your application.

NOTE 2: SELECT MOUNTING STYLE

- 1 = LGA (FL)
- 2 = SCREW (FS)
- 3 = ADHESIVE (FA)
- 4 = BGA SAC305 (FB)
- 5 = BGA SnPb (FP)
- 9 = CUSTOM

APPROVALS	DATE	TopLine®			
DRAWN T. Au	11/11/17				
ENG M. Hart	11/11/17	TITLE EL-SQ21-S PID VIBRATION DAMPER			
MFG		SCALE	SIZE	DRAWING NO.	REV
QA		3:1	A	702119	A
CUST		DO NOT SCALE DRAWING			SHEET 1 OF 3
REVISED					

MODELS ATTACHMENT VARIATIONS



- NOTES:
1. FA (ADHESIVE) AND FS (SCREW) HAVE BARE BOTTOM.
 2. CONTACT TOPLINE FOR OTHER MOUNTING OPTIONS.

TopLine®			
TITLE EL-SQ21-S PID VIBRATION DAMPER			
SCALE 3:1	SIZE A	DRAWING NO. 702119	REV A
DO NOT SCALE DRAWING		SHEET 2 OF 3	

Part Number System

<u>F</u>	<u>A</u>	<u>2.8</u>	<u>SQ</u>	<u>21x</u>	<u>4.5</u>	<u>A</u>
Series	Mounting on PCB	Tungsten Payload Grams	Exterior Shape	X/Y Size	Height	Version/Option
<u>Filled</u>	<u>Mounting Style</u>	<u>Code</u> <u>Grams</u>	<u>Code</u> <u>Shape</u>	<u>Code</u> <u>Size</u>	<u>Code</u> <u>Height</u>	<u>Code</u> <u>Version</u>
F = FR4 Single Layer A = Aluminum Case	A = Adhesive L = LGA NiAu Solderable Bottom Terminal	2.1 = 2.1gm 2.8 = 2.8gm 3.0 = 3.0gm 3.3 = 3.3gm	SQ Square R Rectangle C Cylindrical T Toroid Z Custom	21x = 21mm SQ	4.0 4.0mm 4.5 4.5mm 5.0 5.0mm 7.5 7.5mm	A Standard
<u>Empty</u>	B = BGA SAC305 P = BGA Sn63/Pb37 S = SCREW Fastener	Other Mass Available		Other Sizes Available	Other Sizes Available	Other Version Available
E = FR4 Case L = AL Case						

Order Number

<u>1</u>	<u>1</u>	<u>298</u>	<u>1</u>
DESCRIPTION	Mount Style	Mass (gm) 9 = Decimal	Option Code
<u>Code</u> <u>Description</u>	<u>Code</u> <u>Description</u>	<u>Code</u> <u>MASS</u>	<u>Code</u> <u>Option</u>
1 = Filled PID 5 = Eng Dev Kit 7 = Empty Pkg	1 = LGA 2 = Screw 3 = Adhesive 4 = BGA SAC305 5 = BGA Sn63 Pb37 9 = Custom 0 = Master DWG	291 = 2.1 gm 298 = 2.8 gm 390 = 3.0 gm 393 = 3.3 gm Blank = Empty	1 = Version A 2 = Version B 3 = Version C ... 9 = Version J

TopLine®

TITLE EL-SQ21-S
PID VIBRATION DAMPER

SCALE NONE	SIZE A	DRAWING NO. 702119	REV A
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DO NOT SCALE DRAWING

SHEET 3 OF 3