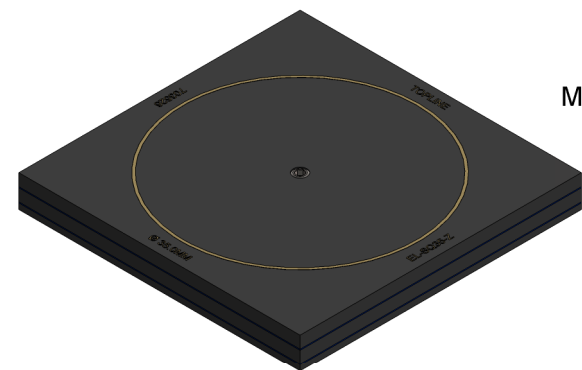


DIMENSION AND WEIGHT (MASS) TABLE

H HEIGHT ±0.5 mm	PCB MASS	TUNGSTEN BALLS IN CAVITY				Total PID MASS	SCREW ADJUST	SCREW HEX HEAD
		Ø DIA	Per Ball	QTY	Mass			
4.0mm	90g	1.5mm	0.031g	290~300	9.0g	18g	2-56	0.035
4.5mm	120g	2.0mm	0.073g	160~170	12.0g	21g	4-40	0.050
5.0mm	130g	2.3mm	0.102g	120~125	13.0g	22g	6-32	1/16
7.5mm	140g	2.5mm	0.143	95~100	14.0g	29g	6-32	1/16



MODEL

U.S. PATENT US 9521753 B1  
OTHER PATENTS PENDING

NOTES: (Unless Otherwise Specified).

1) DIMENSIONS INCH (min)

APPLICATION NOTES:


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

NOTES 2 MOUNTING STYLE (Replace N)

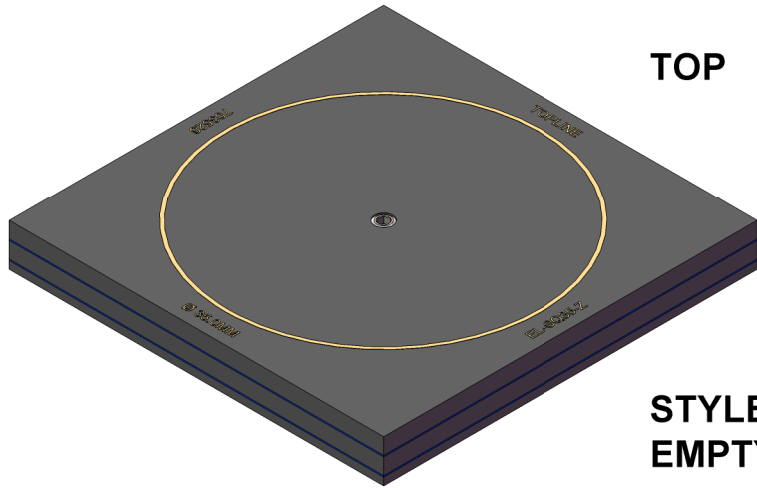
1= LGA (FL)                      4= BGA SAC305 (FB)

2= SCREW (FS)                5= BGA SnPb (FP)

3= ADHESIVE (FA)        9= CUSTOM

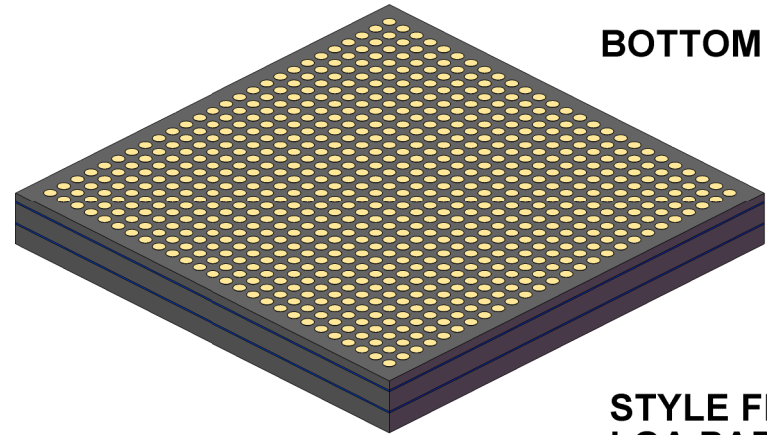
APPROVALS	DATE				
DRAWN T. Au	12/25/2017				
ENG M. Hart	12/25/2017	SCALE 2:1    SIZE A    DRAWING NO. 703526    REV A			
MFG					
QA					
CUST					
REVISED					

**MODELS  
ATTACHMENT VARIATIONS**



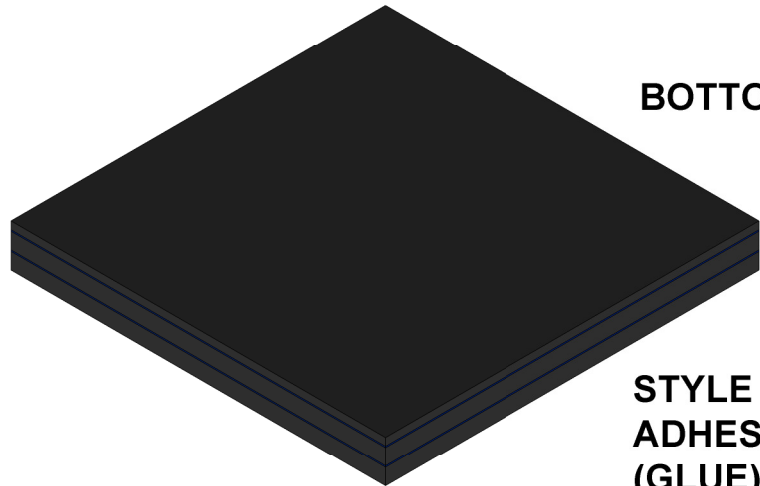
**TOP**

**STYLE EL  
EMPTY**



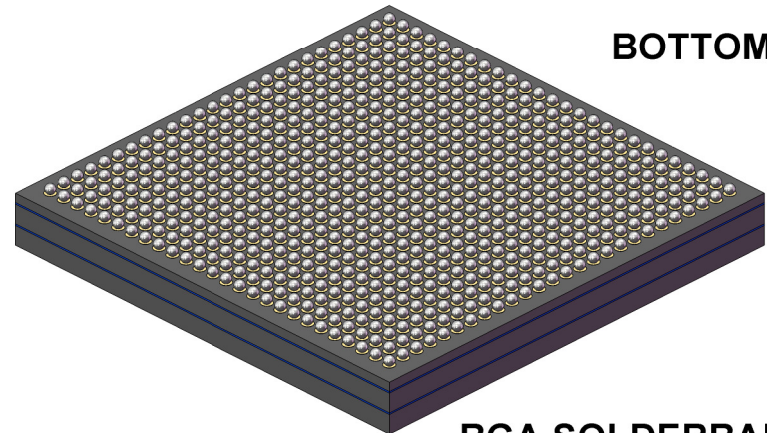
**BOTTOM**

**STYLE FL  
LGA PADS**



**BOTTOM**

**STYLE FA  
ADHESIVE  
(GLUE)**



**BOTTOM**

**BGA SOLDERBALL  
STYLE FB = SAC305 RoHS  
STYLE FP = SnPb**

**TopLine®**

TITLE EL-SQ35- Z  
PID VIBRATION DAMPER

SCALE 2:1	SIZE A	DRAWING NO. 703526	REV A
--------------	-----------	-----------------------	----------

DO NOT SCALE DRAWING


SHEET 2 OF 3

## PART NUMBER SYSTEM

<u>F</u>	<u>A</u>	<u>12</u>	<u>SQ</u>	<u>35x</u>	<u>5.0</u>	<u>A</u>
Series	Mounting on PCB	Tungsten Mass Grams (Mins.)	Shape	X/Y Size	Height	Version/Option
<p><b>Filled</b> F = FR4 Case A = Al Case</p> <p><b>Empty</b> E = FR4 Case L = Al Case</p>	<p><b>Mounting Style</b> A = Adhesive</p> <p>L = LGA NiAu Solderable Bottom Terminal</p> <p>B = BGA SAC Solder Ball</p> <p>P = BGA SnPb Solder Ball</p> <p>S = SCREW Fastener</p>	<p><b>Code • Grams</b> 9.0 = 9.0 12 = 12.0gm 13 = 13.0gm 14 = 14.0gm</p> <p>Other Mass Available</p>	<p>Code • Shape</p> <p>SQ = Square R = Rectangle C = Cylindrical T = Toroid Z = Custom</p>	<p><b>Code Size</b> 35x = 35mm SQ</p> <p>Other Sizes Available</p>	<p><b>Code Height</b> 4.0 = 4.0mm 4.5 = 4.5mm 5.0 = 5.0mm 7.5 = 7.5mm</p> <p>Other Sizes Available</p>	<p><b>Code Version</b> A = Standard T = Tunable</p> <p>Other Version Available</p>

## ORDER NUMBER

<u>1</u>	<u>3</u>	<u>013</u>	<u>1</u>
Alloy	Mount to PCB	Mass (gram) 9 = Decimal	Option Code
<p><b>Code • Description</b></p> <p>1 = Filled PID 5 = Eng Dev Kit 7 = Empty Pkg</p>	<p><b>Code • Description</b></p> <p>1 = LGA 2 = Screw 3 = Adhesive 4 = BGA SAC305 5 = BGA Sn63/Pb37 9 = Custom</p>	<p><b>Code • Grams</b></p> <p>990 = 9.0gm 012 = 12.0 gm 013 = 13.0 gm 014 = 14.0 gm</p>	<p><b>Code Mil</b></p> <p>1 = Version A 2 = Version B 3 = Version C ... 9 = Version J</p>

			
TITLE EL-SQ35-Z PID VIBRATION DAMPER			
SCALE NONE	SIZE A	DRAWING NO. 703526	REV A
DO NOT SCALE DRAWING			SHEET 3 OF 3