

# SHOCK TECH

Solutions For Shock and Vibration Control

## SHOCKBUMPS™

### APPLICATIONS

- Struts
- Shocks
- Formula 1 Racing Cars
- Formula 3 Racing Cars
- Grand Prix 2 Racing Cars
- Grand Prix 3 Racing Cars
- Indy Racing Cars
- Le Mans Racing Cars
- Off-Road Racing
- Racing Trucks
- Sprint Cars

### PERFORMANCE CHARACTERISTICS

- Compression Loaded Elastomer Ring(s) Provide a Cushion Between the Shock or Strut and the Vehicle Structure When the End Stroke of the Shock or Strut is Reached or Bottoms Out
- Dual-Full-Flat Interface Geometry Provides the Most Rapid Entry Into the Full Cushioning Effect
- Half-Round Geometry Provides a More Gentle Entry Into the Full Cushioning Effect
- Dual-Quarter-Round Geometry Provides the Most Gentle Entry Into the Full Cushioning Effect
- Bonded Single Washer, Double Washer or Center Shim(s) Versions are Available to Add Stiffness to any Geometry and Promote Centering of Shock Bump in Asymmetric Loading Conditions
- Neoprene Elastomer (CR) Material Provides Best Performance Stability Over Operational Temperature Range
- Silicone Elastomer (VHDS) Material Provides Best Damping

### ENVIRONMENTAL CHARACTERISTICS

- Neoprene Elastomer (CR) has Operational Temperature Range of -20°F to +180°F (-30°C to +82°C)
- Silicone Elastomer (VHDS) has Operational Temperature Range of -67°F to +300°F (-55°C to +150°C)
- Neoprene Elastomer (CR) is Resistant to Oil and Ozone
- Silicone Elastomer (VHDS) is Ozone and Fungus Resistant and Does not Propagate Fungal, Mold, or Mildew Growth

### INSTALLATION AND MOUNTING

- Sizes are Available to Suite Common Shock and Strut Rod Diameters (See Table)
- Custom Rod Diameter Dimensions are Available on Request (Consult with Shock Tech Engineering)
- Simply add to Existing Standard Shock and Strut Assemblies
- No special tools required



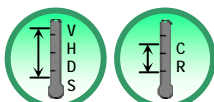
Shock Tech's Line of Elastomer Damping Bumpers Called SHOCKBUMP®, is Designed Specifically for Racing Struts and Shocks. Shock Bumps Provide Additional Suspension Tuning Possibilities When Added to Shock or Strut Assemblies That Snub or Bottom-out at Maximum Stroke During Racing Conditions. Multiple Shapes, Stiffnesses and Materials Allow for Precision Adjustment of the Snubbing Reaction at Individual Shocks or Struts for Improved Performance. Shock Bumps Have Been Used Successfully on Different Suspension Applications of Formula 1, Le Mans, Grand Prix 2, Grand Prix 3, Formula 3, 3.5 WSR, NASCAR®, Indy Car, and Other Racing Cars. Shock Tech can design, develop, test, and manufacture ShockBumps™ that meet custom race car and track requirements. Damping and hysteresis characteristics will be met using Shock Tech's unique elastomer materials.

### MATERIALS

Resilient Element =

- **Shock Tane:** For high damping and large hysteresis characteristics
- **Shock Sil:** For high, moderate, or low damping requirements and extreme temperature environment: -65°F to 300°F (-55°C to +149°C)
- **Shock Stic:** For very low damping or minimum hysteresis requirements

Metal = Stainless Steel (Other Materials Available, Consult with Shock Tech Engineering)

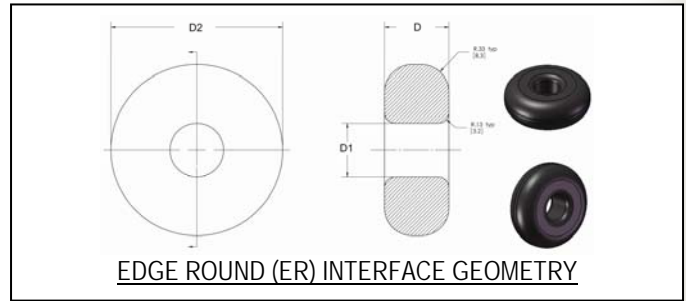
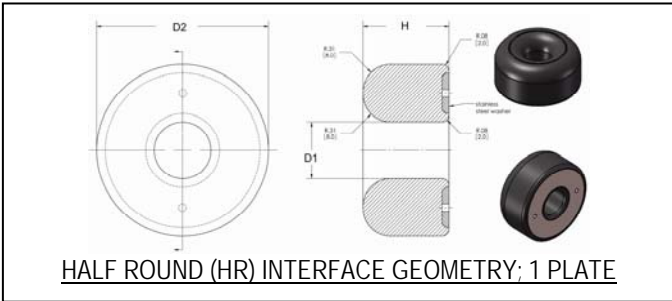
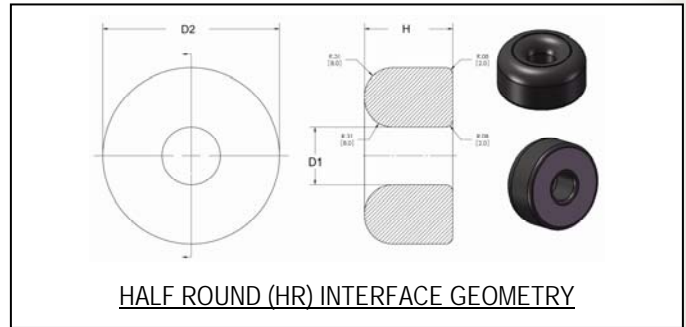
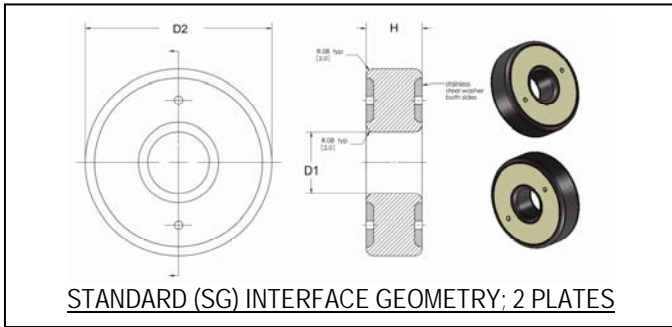
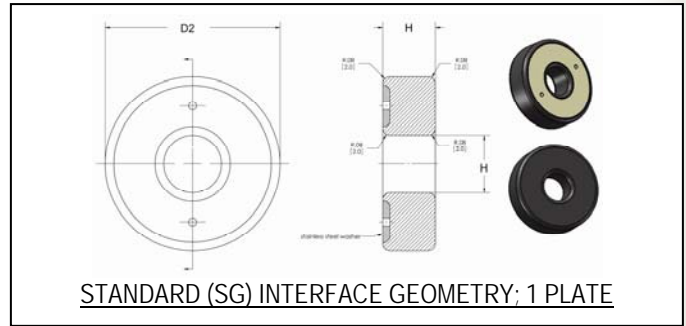
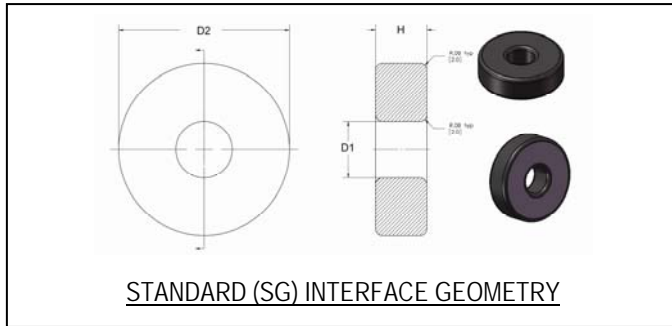


**SHOCK TECH**  
Solutions For Shock & Vibration Control

SHOCKBUMP® SERIES

360 Route 59 - Monsey, NY 10952; Phone: 845 368-8600  
Fax: 845 368-8799 E-mail: info@shocktech.com www.shocktech.com

# DIMENSIONAL PLOTS AND PART NUMBER MATRIX



SHOCK BUMP SERIES	INTERFACE GEOMETRY	D1		D2		H		WASHER PLATE A	WASHER PLATE B
		ID (mm)	ID (in)	OD (mm)	OD (in)	HEIGHT (mm)	HEIGHT (in)		
70879-()-()	SG	13.5	0.531	32	1.260	15	0.591	0	0
70880-()-()						7.5	0.295	1	1
70888-()-()						0	0	0	0
70877-()-()						15	0.591	0	0
70878-()-()						1	1	0	0
70909-()-()		16.5	0.650	50	1.969	44.5	1.752	0	0
70852-()-()						15	0.591	0	0
70853-()-()						1	0	1	0
70854-()-()						1	1	0	0
70855-()-()						20	0.787	1	0
70856-()-()						1	1	0	0
70857-()-()						1	1	0	0
70858-()-()						25	0.984	1	0
70859-()-()						1	0	1	0
70860-()-()						1	1	0	0
70850-()-()	HR	16.5	0.650	50	1.969	25	0.984	0	0
70851-()-()						1	0	0	0
70985-()-()	ER	15.9	0.626	50.8	2.000	19.1	0.752	0	0
71014-()-()						12.7	0.500	0	0
70911-()-()						25	0.984	0	0