

Rubber Heaters / Adhesives for Rubber Heater

Square Both Side Flat Type

Be sure to refer to "Precautions for Use" in the Rubber Heaters Overview on P.1511.

■ Square Both Side Flat Type

RoHS 6

MRHSF

Material : Silicon Rubber
Lead Wire : Nickel (Ni)
Lead Wire Film: Teflon

Maximum Operating Temperature: 200°C
A≥B

■ Rubber Heaters (Square Both Side Flat Type)

Part Number Type	5mm Increment		V (Voltage)	W (Electric Power) 10W Increment	F (Lead Wire Length) 10mm Increment	Lead Wire Retaining Sheet Dimension		Electrical Power Density (W/cm ²)
	A	B				A1	B1	
MRHSF	50~500	25~50	100 200	10~1600	100~1000	25	25	0.2≤W/cm ² ≤0.8 W/cm ² =W/(AB/100)
		55~100				25	40	
		105~200				40	40	
		205~350				60	100	
		355~400				80	120	

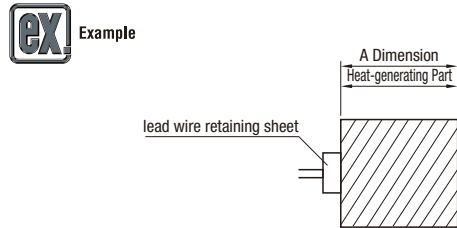
Ordering Example: Part Number - **A** - **B** - **V** - **W** - **F**
MRHSF - 200 - 200 - V200 - W210 - F1000

■ Feature
 - As the lead wire retaining sheets are away from heat-generating part, it is easy to sandwich the heater.
 - Closer contact with workpiece allows for higher heat efficiency than the conventional products.
 - Only have to specify heating portion.

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Price [Configure Online](#)

A	Unit Price						
	B25-50	B55-100	B105-150	B155-200	B255-300	B305-350	B355-400
50~100							
105~150							
155~200							
205~250							
255~300							
305~350							
355~400							
405~450							
455~500							



As the lead wire retaining sheets are away from the heat-generating part, only have to specify heat-generating part.

Easy-to-use sandwich construction. Has higher heat efficiency than the conventional products such as MRHSS.

■ Adhesives for Rubber Heater

RoHS 6

Part Number	Volume (ml)	Features	Color	Usage	Operating Temp. Range	How to Use	Unit Price Qty. 1-10
MRHSB	330	Suitable for bonding rubber with metal plates under high temperature (180°C). Also suitable for metals with rough surfaces and curved surfaces.	Transparent	Adhesion of Silicon Rubber	-40°C ~ 180°C	Apply it on the adhered surface of rubber heater uniformly. After the adhesive sets a little (approx. 10 ~ 15 minutes in summer, 35 ~ 40 minutes in winter), stick it on the fixing surface (metal block, etc.), purge air from the rubber surface, and press on it uniformly. Leave it alone for one day after the affixing, then apply electric power.	

Thermal Conductivity: 0.21 {5x10⁻⁴} W/m, K {cal/cm, sec, °C} For orders larger than indicated quantity, please request a quotation.

Ordering Example: Part Number **MRHSB**

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Rubber Heaters

Round / Square (with Thermostat)

Be sure to refer to "Precautions for Use" in the Rubber Heaters Overview on P.1511.

■ Rubber Heaters (Round)

RoHS 6

MRHCS (Standard)

MRHCH (Standard)

MHRHH (High Temperature)

Material : Silicon Rubber
Lead Wire : Nickel (Ni)
Lead Wire Film: Teflon

Maximum Operating Temperature Standard: 220°C
High Temperature : 250°C

■ Round Rubber Heater

Part Number Type	D 1mm Increment	V (Voltage)	W (Electric Power) 10W Increment	F (Lead Wire Length) 10mm Increment	Electrical Power Density (W/cm ²)	Unit Price	
						MRHCH	MHRHH
MRHCS (Standard)	60~100	100 200	10~60	100~1000	0.2≤W/cm ² ≤0.8 W/cm ² =W/[π(D/2) ² /100]		
	101~150		10~130				
	151~200		50~240				
	201~300		50~500				
	301~400		50~700				

■ Round Rubber Heater (with Hole)

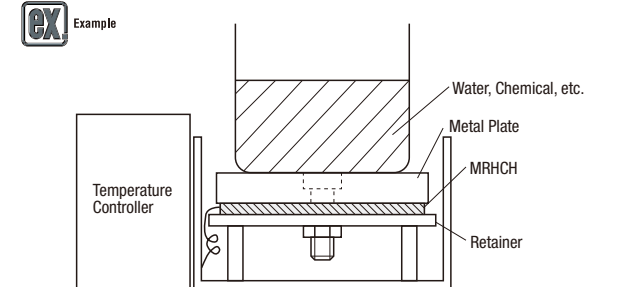
Part Number Type	D 1mm Increment	E 1mm Increment	V (Voltage)	W (Electric Power) 10W Increment	F (Lead Wire Length) 10mm Increment	Electrical Power Density (W/cm ²)	Unit Price	
							MRHCH	MHRHH
MRHCH (Standard) MHRHH (High Temperature)	70~100	3~440 E: D-60	100 200	10~60	100~1000	0.2≤W/cm ² ≤0.8 W/cm ² =W/[π(D/2) ² /100]-π(E/2) ² /100]		
	101~150			10~130				
	151~200			50~240				
	201~300			50~500				
	301~400			50~700				

Ordering Example: Part Number - **D** - **E** - **V** - **W** - **F**
MRHCS - 180 - - V200 - W80 - F1000
MRHCH - 100 - E30 - V100 - W20 - F600

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Price [Configure Online](#)

Alteration	Code	Spec.	No.	Price Adder
With Double-sided Tape	TPG	Affix double-sided tape to the rear surface of the rubber heater. Shipped with tape affixed. Tape Thickness: 0.3mm. Maximum operating temperature for rubber heaters with tapes is 150°C.	1	D60-150
			2	D151-300
			3	D301-500



■ Rubber Heaters (Square)

RoHS 6

MRHSSB

Material : Silicon Rubber
Lead Wire : Nickel (Ni)
Lead Wire Film: Teflon

Maximum Operating Temperature: 220°C
A≥B

■ Thermostat Operating Temperature Rating

Thermostats Operating Temperature (°C)	ON Point	OFF Point
80	(65±8)°C	(80±4)°C
120	(100±10)°C	(120±5)°C
150	(125±15)°C	(150±6)°C
180	(140±15)°C	(180±8)°C

It energizes (ON) when the power is turned on and the contact point shuts off when it reaches to the operation temperature rate (OFF) and electricity is turned off. It automatically recovers when it is below the rated operating temperature.
 (Ex) When at thermostat operation temperature (°C) 80, contact point shuts off at (80±4)°C after electricity is supplied. It will automatically recover when it becomes (65±8)°C. In temperature adjustment, set it lower than the temperature of OFF point tolerance (in case of 80°C: 80-4~76°C or less).

■ Rubber Heaters Square (with Thermostat)

Part Number Type	1mm Increment A	B	V (Voltage)	W (Electric Power) 10W Increment	S (Thermostat Operating Temperature) (°C)	Electrical Power Density (W/cm ²)
MRHSSB	120~500	80~400	100 200	10~1000	80 120 150 180	0.2≤W/cm ² ≤0.8 W/cm ² =W/(AB/100)

Ordering Example: Part Number - **A** - **B** - **V** - **W** - **S**
MRHSSB - 200 - 200 - V200 - W80 - S120

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■ Feature
 - The bimetal thermostat with automatic recovery system prevents overheating of rubber heaters.

(Features of Thermostats)
 Principle of Operation: Bimetal Non-energizing Type Single Pole Single Throw Operating Temperature One Point Fixed Type
 Operating Method: OFF when temperature rises, and ON when temperature drops (Electric Rating)
 Resistance Load AC125V/15AAC250V/7.5A (Minimum Current: 0.1A) (Contact Resistance)
 50mΩ or less according to minute current ohmmeter (DC6V/0.1A) (Initial Value) (Insulation Resistance)
 10MΩ or more with DC500V mega in the charge part and non-charge part (Insulation Resistance)
 AC1500V/min or AC1800V/sec in the charge part and non-charge part (Leakage Current: 10mA) (ON/OFF life span)
 The thermal ON/OFF operation is done approx. 10,000 times or less at the load of rated current and voltage.
 Insulation Resistance: 50MΩ; Contact resistance: 100mΩ or less

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A	Unit Price						
	B80-100	B101-150	B151-200	B201-250	B251-300	B301-350	B351-400
120-150							
151-200							
201-250							
251-300							
301-350							
351-400							
401-450							
451-500							

■ How to Mount
 Apply Rubber Heater (left-hand page) and attach to the heated object. P.1513

■ Precautions for Use
 - The thermostat should not be used for temperature adjustment. Please use it as overheat protector.
 - Do not apply force to thermostat.
 - There are temperature gaps (about 10~40°C) between thermostat operating temperature and heater surface temperature, and between thermostat and heated object. Please check before actual use.
 - A part of upper terminal of thermostat is exposed. Please pay attention to short circuit.
 - Do not use it in flammable atmospheres.
 - To avoid burn injury, do not touch the heater when the power supply is on or immediately after use.