

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.

RoHS 10

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	

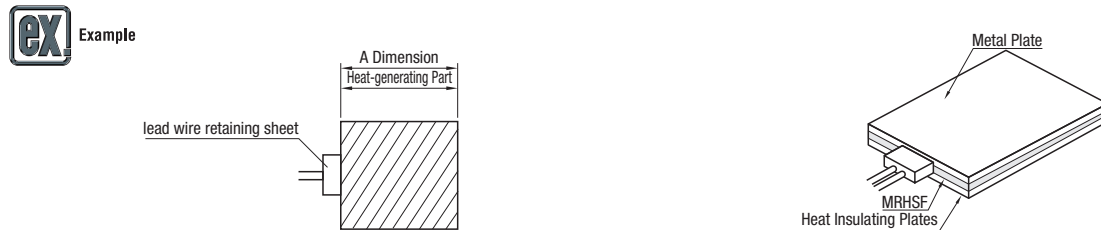
Ordering Example: Part Number - **A** - **B** - **V** - **W** - **F**
MRHSF - 200 - 200 - V200 - W210 - F1000

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.

Days to Ship [Configure Online](#)

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 MRHCS.

RoHS 10

MRHSB

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.

RoHS 10

MRHCS (Standard)

Hole Type
MRHCH (Standard)
MHRHH (High Temperature)

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

Lead Wire Retaining Sheet Dimensions

Type	Current Value A	C	G
MRHCS	Less than 5A	(25)	(40)
MRHCH	5A to less than 8A	(40)	(40)
MHRHH	8A	(40)	(80)

Dimensions in () are reference values.

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

(High Temperature)
 Material: Heat Resistant Silicon Rubber
 Lead Wire: Nickel (Ni)
 Lead Wire Film: Teflon

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				
401-500	50-800						

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				
401-500	50-800							

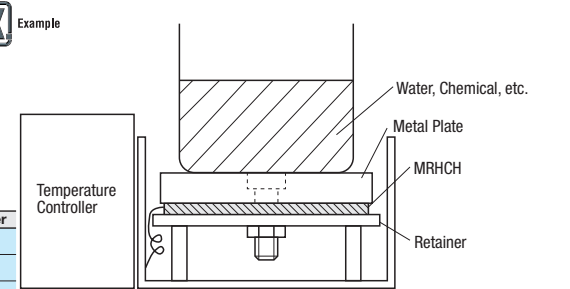
Ordering Example: Part Number - **D** - **E** - **V** - **W** - **F**
MRHCS - 180 - - V200 - W80 - F1000
MRHCH - 100 - E30 - V100 - W20 - F600

Days to Ship [Configure Online](#)

Price [Configure Online](#)

Alterations: Part Number - **D** - **V** - **W** - **F** - (TPG)
MRHCS - 180 - V200 - W80 - F1000 - TPG2

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. When ordering TPG1 for MRHCH and MHRHH, D will be 70 to 150.	1	D60-150
			2	D151-300
			3	D301-500



RoHS 10

MRHSSB

Maximum Operating Temperature: 220°C
 A≥B

Lead Wire Retaining Sheet Dimensions

Type	Current Value A	C	D	E
MRHSSB	Less than 5A	(25)	(40)	(33)
	5A to less than 8A	(40)	(40)	(18)
	8A-10A	(40)	(100)	(18)

Dimensions in () are reference values.

Material: Silicon Rubber
 Lead Wire: Nickel (Ni)
 Lead Wire Film: Teflon
 Thermostats: Ceramic (Steatite Type)
 Cap: Aluminum
 Bimetal: Disk Bimetal

Rubber Heaters Square (with Thermostat)

Part Number Type	1mm Increment	V (Voltage)	W (Electric Power) 10W Increment	S (Thermostat Operating Temperature) (°C)	Electrical Power Density (W/cm ²)
MRHSSB	120-500	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

Days to Ship [Configure Online](#)

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/15A AC250V/7.5A Operating temperature 80°C/120°C/150°C
 AC125V/10A AC250V/5A Operating temperature 180°C
 (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

Price [Configure Online](#)

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.