

YAMATO GOKIN CO., LTD.

ALLOY DATA SHEET

SH-1

1. Characteristics

- High thermal conductivity
- Excellent electrical conductivity
- High strength

2. Related Specifications

- RWMA Class 2
- JIS Z 3234

3. Applications

- Electrode for resistance welding
- Bushings for seam welders
- Short-circuit ring and Rotor bar for asynchronous machines with squirrel cage
- Backing plates under target metals for semiconductors and liquid crystal displays
- Base metal for gas/steam turbine bearings
- Molds for continuous casting machines

4. Chemical Composition

Designation: SH - 1 (%)

Element	Cr	Zr	Cu
Min	0.7	0.02	balance
Max	1.4	0.06	

5. Physical Properties

Density	g/cm ³	8.89
Young's modulus	N/mm ²	120,000
Coefficient of expansion 20 to 300° C	× 10 ⁻⁶ /° C	17.6
Thermal conductivity	W/m K	330
Electrical conductivity	IACS %	75

