

# Product Comparison Data

**SS58-M956-2**

**vs.**

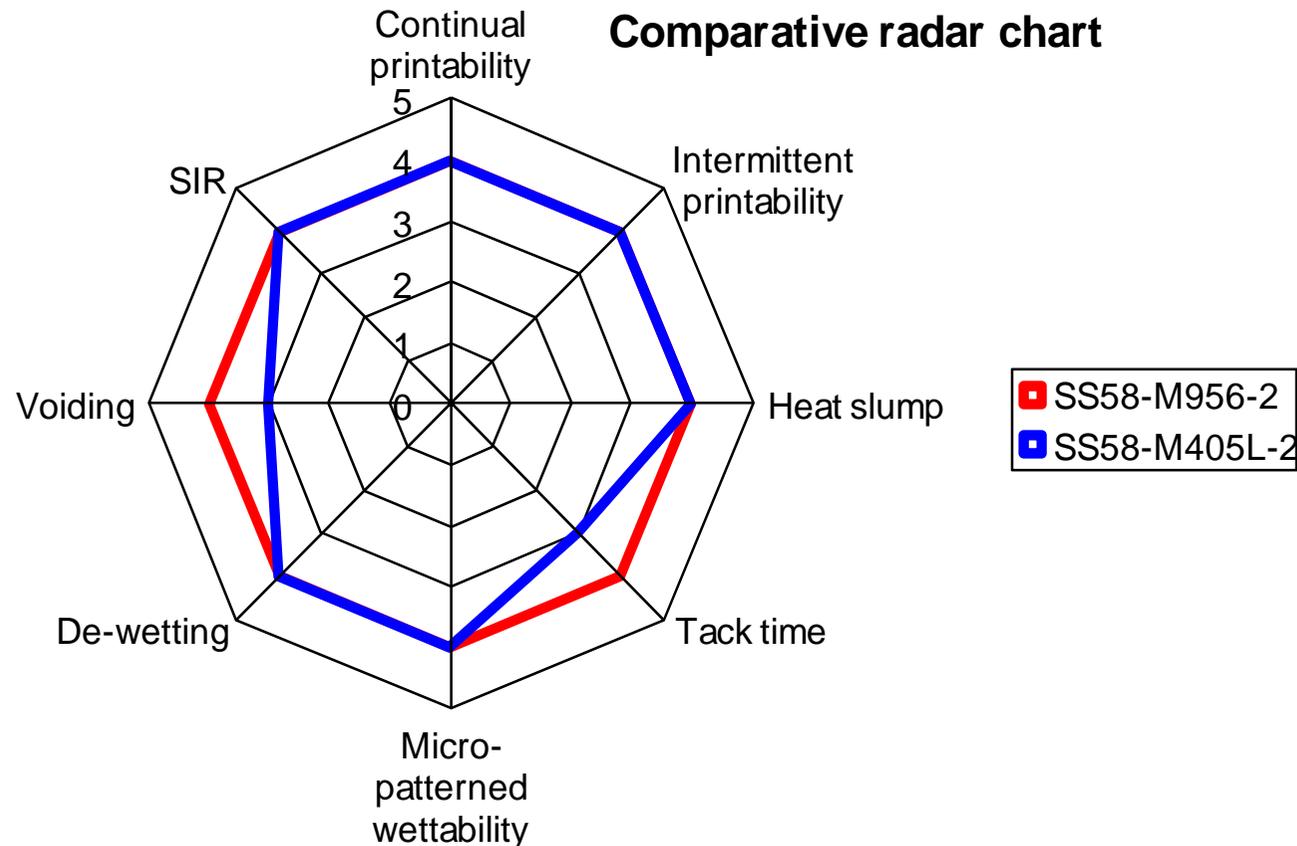
**SS58-M405L-2**

(to be discontinued)

# Specifications

Product		Currently in use: SS58-M405L-2	Recommended for replacement: SS58-M956-2	Remarks:	
Alloy	Alloy	Sn62 Pb36 Ag2		—	
	Melting point (°C)	179-190		—	
	Shape	Spherical		—	
Product	Halide content	0		Potentiometric titration	
	Flux type	ROL0		IPC-JSTD-004A	
	Insulation resistance	Initial ( $\Omega$ )	$\geq 1E + 12$		Outside chamber
		After humidification( $\Omega$ )	$\geq 1E + 11$		85°C-85%1000Hr
	Flux content (%)	10	10.0	JIS Z3197	
	Viscosity (Pa.s)	160	200 *Slightly higher than M405L-2, but will not interfere printability.	JIS Z3284	
	Copper plate corrosion	Pass		JIS Z3284	
	Heat slump	0.2pass	0.2mm pass *Equivalent resistance to M405L-2.	JIS Z3284	
	Tack time	$\geq 24$ hrs.	$\geq 48$ hrs. *Longer tack time than M405L-2.	JIS Z3284	
	Shelf life (10°C or below)	6 mo.		—	
Practical	Printability	0.25mm $\phi$ 0.4mmpQFP	0.25mm $\phi$ 0.4mmpQFP *Equivalent printability to M405L-2.	In-house criteria	
	Micro-patterned wetting	0.25mm $\phi$ 0603 chip component	0.25mm $\phi$ 0603 chip component *Equivalent wetting property to M405L-2.	Air reflow	

# Summary



We always thank you for your selecting SS58-M405L-2 and continuous use. SS58-M956-2, recommended for replacement, is a solder paste designed for general applications with stable printing, wetting, and voiding properties.

SS58-M956-2 ensures equivalent functions and electric reliability.

Please kindly refer to its technical information for the details and evaluate it accordingly.

# Outline of comparative evaluation method



Evaluation item	Evaluation method outline
Continual printability	Print each solder paste on KOKI original test board and observe print formation and occurrence of slumping and bridging.
Intermittent printability	Print each solder paste at certain intervals and measure tolerable time that solder paste can be printed without print defects due to its drying.
Heat slump	In accordance with JIS-Z 3284. Print each solder paste and observe minimum gap size without bridging due to the occurrence of heat slumping of deposited solder paste during pre-heating. Poor heat slumping property often raises solder beading and mid-chip balling.
Tack time	In accordance with JIS-Z 3284. To evaluate the tackiness of each solder paste (strength to hold mounted components not to fall), measure the time until tack force indicates less than 100g.f.
Micro-patterned wettability	Observe wettability of each solder paste at 0.25mm dia. pattern and 0603 chip after reflow.
De-wetting	Print each solder paste on Cu, Ni, and Brass plate (aperture: 6.5mm dia. x 0.2mm thick), float those plates on solder bath and observe wetting conditions.
Voiding	Observe the occurrence of voiding in the solder joints of various components such as Pw-Tr, QFP, BGA and chip resistor soldered on KOKI original test board through X-ray transmission scanner.
SIR	Observe the occurrence of migration or measure SIR value in accordance with JIS-Z3284 or IPC J-STD-004.