

MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

Product data sheet

www.msksemi.com

1.1 Technology Data	Symbol		Value	Unit
Maximum allowable continuous AC voltage at 50-60Hz	V_{RMS}		18	V
Maximum allowable continuous DC voltage	V_{DC}		12	V
Varistor voltage measured * ₁	V_V		100~150	V
Typical capacitance value measured at 1MHz	C		1	pF
Typical capacitance value tolerance			+80-20	%
Maximum ESD allowable clamping Voltage* ₂	V_{CLAMP}	<	200	V
Leakage current at V_{DC} * ₃ (At initial state)	I_{LDC}	<	0.1	uA
Leakage current at V_{DC} * ₃ (After ESD Test)	I_{LDCA}	<	2	uA
1.2 Reference Data				
Response time	T_{rise}	<	0.5	ns
Operation ambient temperature			-50~ +85	°C
Storage temperature			-50~+125	°C
ESD testing	IEC61000-4-2		level 4	
1.3 Other Data				
Body			ZnO	
End termination			Ag/Ni/Sn	
Packaging			Reel	
Complies with Standard			IEC61000-4-2	
Complies with RoHs Standard			Yes	
Lead Content		<	1000	ppm
Marking			None	

Notes :

- * 1 The varistor voltage was measured at 1 mA current
- * 2 The Clamping voltage was measured at 8*20 us standard current.
- * 3 The Leakage current was measured at working voltage.
- * 4 The Energy only for customer reference.
- * 5 The components shall be employed within 1 year, in the nitrogen condition.

PACKAGE MECHANICAL DATA

Dimension	(Unit : mm)	
	Min.	Max.
A	0.4	0.6
B	1.4	1.8
C	0.5	0.6
D	0.6	1.2

0402

The IR reflow and temperature of Soldering for Pb Free

☆ **IR reflow Pb Free Process suggestion profile**

- (1) The solder recommend is Sn96.5/Ag 3.5 of 120 to 150 μ m
- (2) Ramp-up rate (217°C to Peak) + 3°C/second max
- (3) Temp. maintain at 175 +/-25°C 180 seconds max
- (4) Temp. maintain above 217 °C 60-150 seconds

REEL SPECIFICATION

P/N	PKG	QTY
SURGE04B03-MS	0402	10000

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