

# MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

Product data sheet

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 * <sub>1</sub>	$V_V$		100~150	V
Typical capacitance value measured at 1MHz	$C$		1	pF
Typical capacitance value tolerance			+80-20	%
Maximum ESD allowable clamping Voltage* <sub>2</sub>	$V_{CLAMP}$	<	200	V
Leakage current at $V_{DC}$ * <sub>3</sub> (At initial state)	$I_{LDC}$	<	0.1	uA
Leakage current at $V_{DC}$ * <sub>3</sub> (After ESD Test)	$I_{LDCA}$	<	2	uA
<b>1.2 Reference Data</b>				
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	
<b>1.3 Other Data</b>				
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  $\mu$ 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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