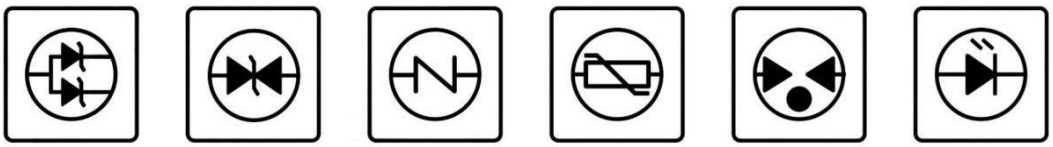
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AU0511P1-MS

Product specification

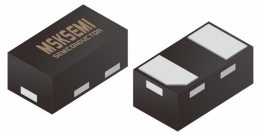
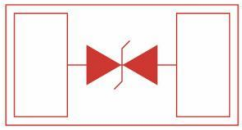
Features

- Capacitance:3.5pF(typ.)
- ReverseWorkingVoltage:5V
- IEC61000-4-2(ESDAir):±25KV
- IEC61000-4-2(ESDContact):±20KV
- IEC61000-4-5(Lightning8/20μs):2.5A

Applications

- Cellularphones
- Portabledevices
- Digitalcameras
- Powersupplies

Reference News

PACKAGE OUTLINE	PIN Configuration	Marking
		
DFN1006		

Limiting Values(TA = 25 °C, unless otherwise specified)

Symbol	Parameter	Conditions	Min	Max	Unit
V_{ESD}	Electrostatic Discharge Voltage	IEC 61000-4-2; Contact Discharge	-	±20	kV
		IEC 61000-4-2; Air Discharge	-	±25	kV
P_{PP}	Peak Pulse Power	t_P = 8/20 μs	-	40	W
I_{PPM}	Rated Peak Pulse Current	t_P = 8/20 μs	-	2.5	A
T_A	Ambient Temperature Range	-	-55	150	℃
T_{stg}	Storage Temperature Range	-	-55	150	℃

Electrical Characteristics(TA = 25 °C, unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ.	Max	Unit
V_{RWM}	Reverse Working Voltage	T_A = 25 °C	-	-	5.0	V
V_{BR}	Breakdown Voltage	I_R = 1mA; T_A = 25 °C	5.6	-	9.0	V
I_R	Reverse Leakage Current	V_{RWM} = 5V; T_A = 25 °C	-	-	100	nA
V_C	Clamping Voltage	I_{PP}= 1A, t_P =8/20μs	-	-	13	V
		I_{PP}=2.5A, t_P =8/20μs	-	-	16	V
C_J	Junction Capacitance	V_R = 0V, f = 1 MHz	-	3.5	4.0	pF

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TypicalCharacteristics

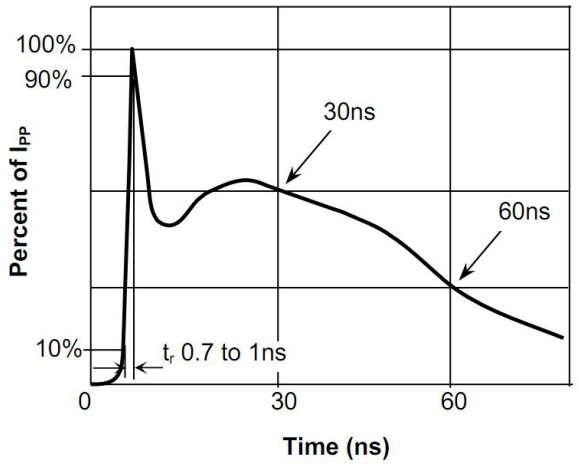


Fig.1 Pulse Waveform-ESD (IEC61000-4-2)

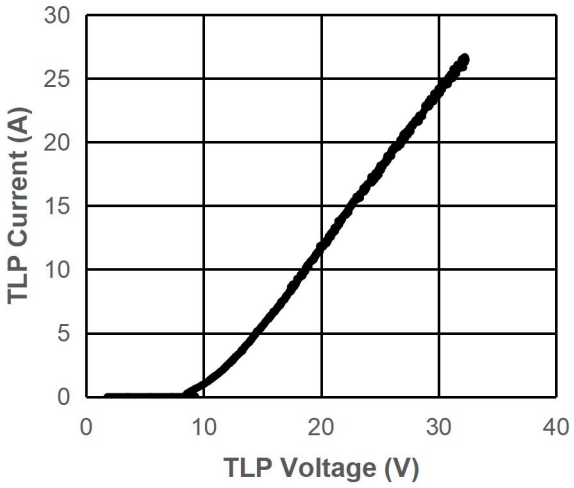


Fig.2 Transmission Line Pulse (TLP)

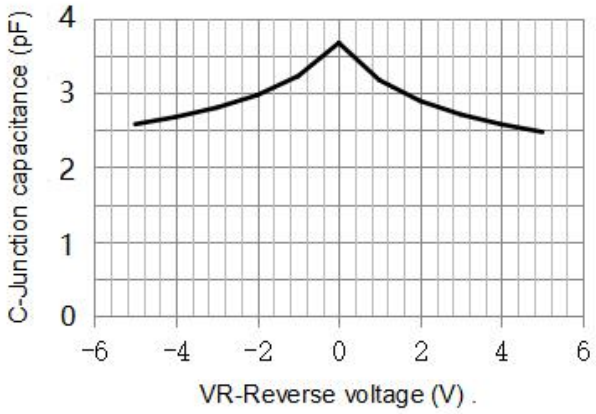


Fig.3 Capacitance vs. Reveres Voltage

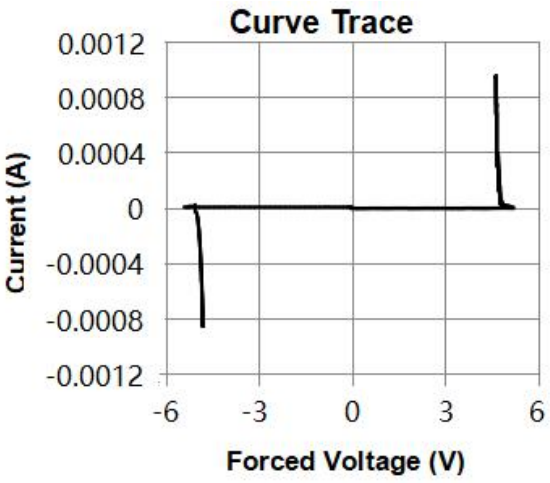
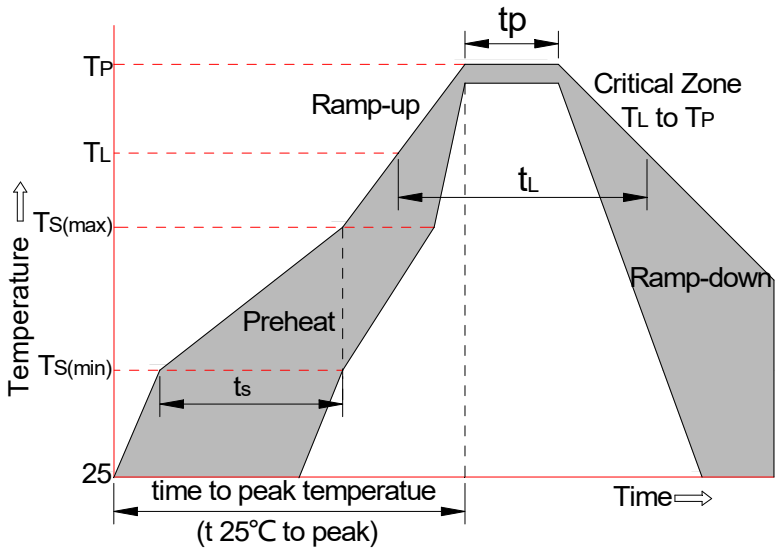


Fig.4 IV Curve（Forward Voltage）

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SolderingParameters

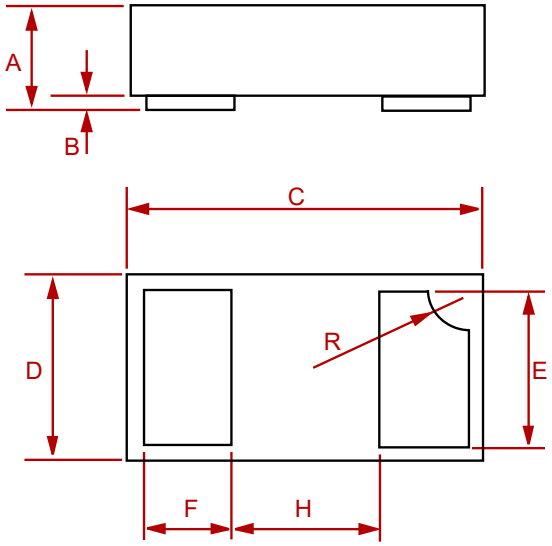
FIG.5: Reflow condition



Reflow Condition		Pb-Free Assembly
Pre-heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217°C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_p)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6°C/sec. Max
xTime 25°C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260°C

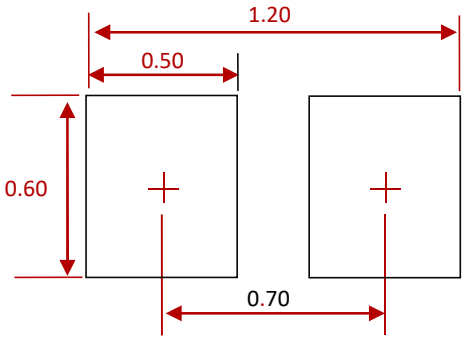
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PACKAGE MECHANICAL DATA



Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.0125	0.02	0.32	0.52
B	0.000	0.002	0.00	0.05
C	0.037	0.043	0.95	1.080
D	0.022	0.027	0.55	0.680
E	0.016	0.024	0.40	0.60
F	0.008	0.012	0.20	0.30
H	0.015Typ.		0.40Typ.	
R	0.001	0.005	0.05	0.15

Suggested Pad Layout



NOTES:

1. CONTROLLING DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).
2. THIS LAND PATTERN IS FOR REFERENCE PURPOSES ONLY.
   CONSULT YOUR MANUFACTURING GROUP TO ENSURE YOUR
   COMPANY'S MANUFACTURING GUIDELINES ARE MET.

REEL SPECIFICATION

P/N	PKG	QTY
AU0511P1-MS	DFN1006	10000

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