

FEATURES

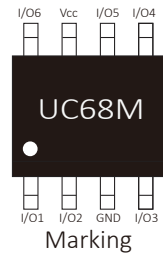
- | 105W Peak Pulse Power per Line (tp=8/20μs)
- | Protects Six High Speed I/O Lines and Vcc
- | Low Clamping Voltage

APPLICATIONS

- | USB Series or High-Speed Data Line
- | Microprocessor based equipment
- | Video Graphs Cards
- | Digital Video Interface (DVI)
- | High Definition Multi-Media Interface (HDMI)
- | IEEE1394 Firewire Ports
- | CCD Camera Lines



MSOP-8



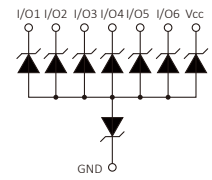
Marking

IEC COMPATIBILITY

- | IEC61000-4-2 (ESD) ±17kV (air), ±15kV (contact)
- | IEC61000-4-4 (EFT) 40A (5/50ns)

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003



Schematic Symbol

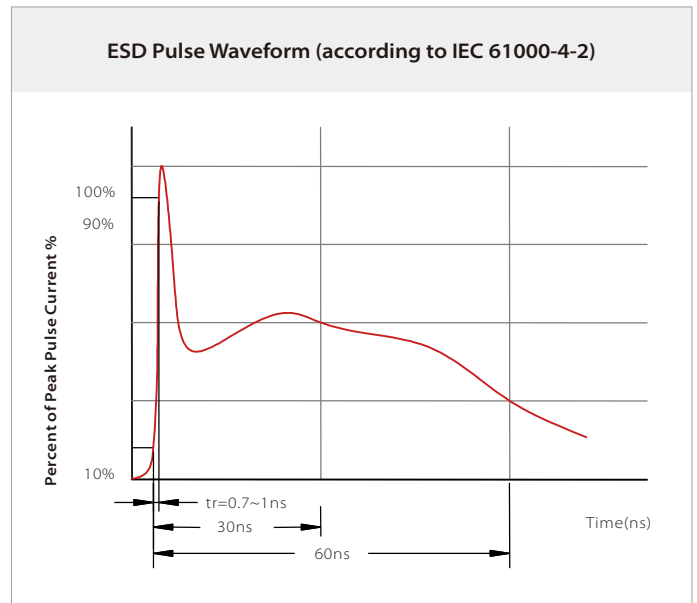
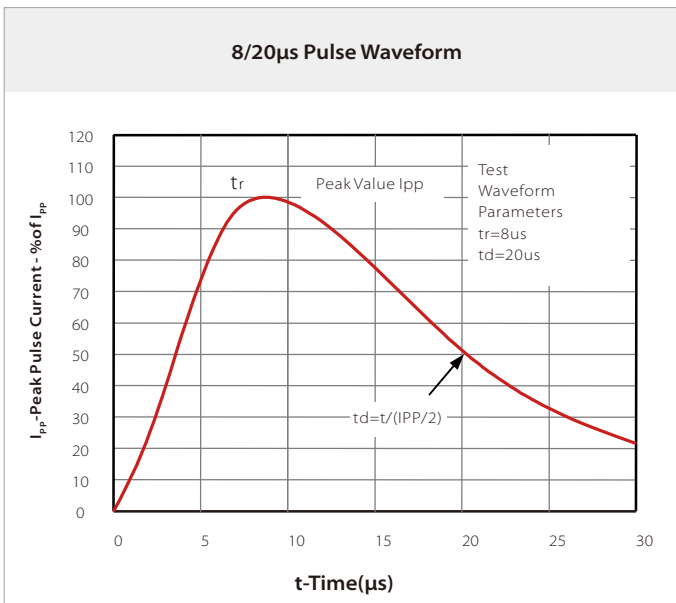
THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
P_{PP}	Peak Pulse Power (tp=8/20μs waveform)	105	Watts
T_J	Operating Temperature Range	-40 to +125	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

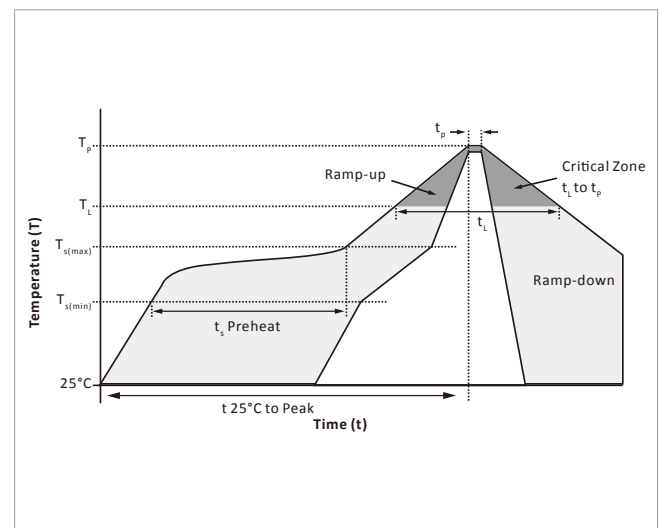
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Stand-off Voltage				5	V
V_{BR}	Reverse Breakdown Voltage	$I_T=1mA$	6			V
I_R	Reverse Leakage Current	$V_{RWM}=5V$			0.1	μA
V_C	Clamping Voltage	$I_{pp}=1A, tp=8/20us$			13.5	V
V_C	Clamping Voltage	$I_{pp}=2A, tp=8/20us$			20	V
V_C	Clamping Voltage	$I_{pp}=3.5A, tp=8/20us$			30	V
I_{PP}	Peak Pulse Current	tp=8/20us			3.5	A
C_J	Off State Junction Capacitance	$V_R=0V, f=1MHz$		0.35		pF

CHARACTERISTIC CURVES

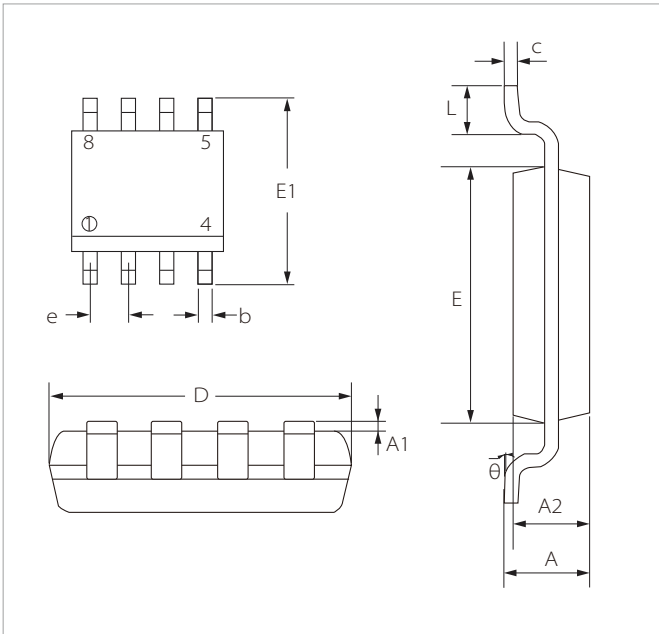


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

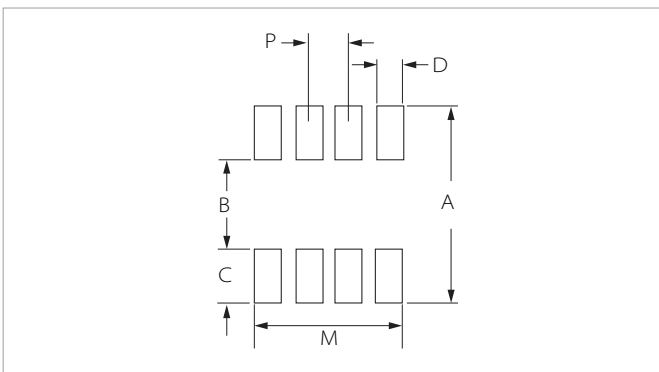


MSOP-8 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.82	1.10	0.032	0.043
A1	0.02	0.15	0.001	0.006
A2	0.75	0.95	0.030	0.037
b	0.25	0.38	0.010	0.015
c	0.09	0.23	0.004	0.009
D	2.90	3.10	0.114	0.122
e	0.65BSC		0.026BSC	
E	2.90	3.10	0.114	0.122
E1	4.75	5.05	0.187	0.199
L	0.40	0.80	0.016	0.031
θ	0°	6°	0°	6°

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	5.70	5.90	0.224	0.232
B	3.50	3.70	0.138	0.150
C	1.00	1.20	0.040	0.047
D	0.25	0.45	0.010	0.018
M	2.20	2.40	0.090	0.094
P	0.55	0.75	0.022	0.030

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SE8PM10U5.0MG	MSOP-8	3000PCS	13"

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