

FEATURES

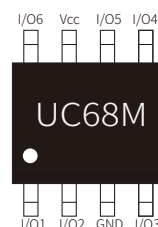
- | 105W Peak Pulse Power per Line ($t_p=8/20\mu s$)
- | Protects Six High Speed I/O Lines and Vcc
- | Low Clamping Voltage

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



SOP-8



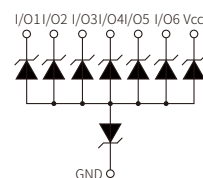
Marking

IEC COMPATIBILITY

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

APPROVALS

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



Schematic Symbol

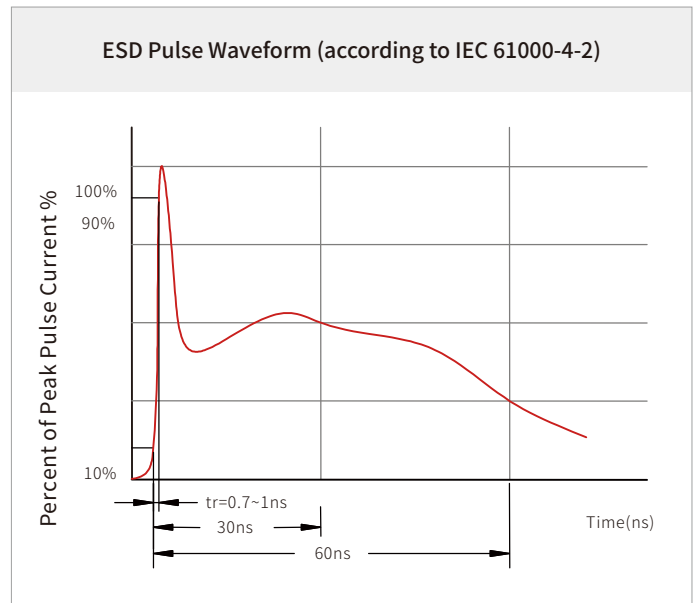
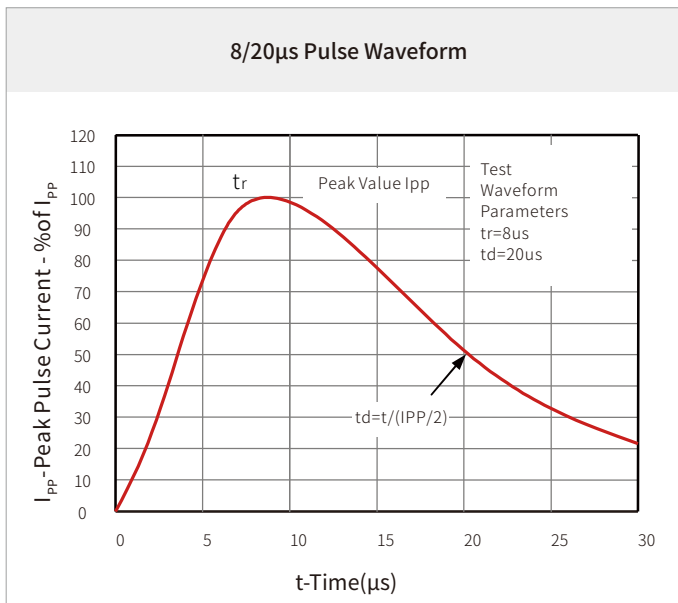
THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
P_{pp}	Peak Pulse Power ($t_p=8/20\mu s$ waveform)	105	Watts
T_J	Operating Temperature Range	-40 to +125	$^{\circ}C$
T_{STG}	Storage Temperature Range	-55 to +150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS

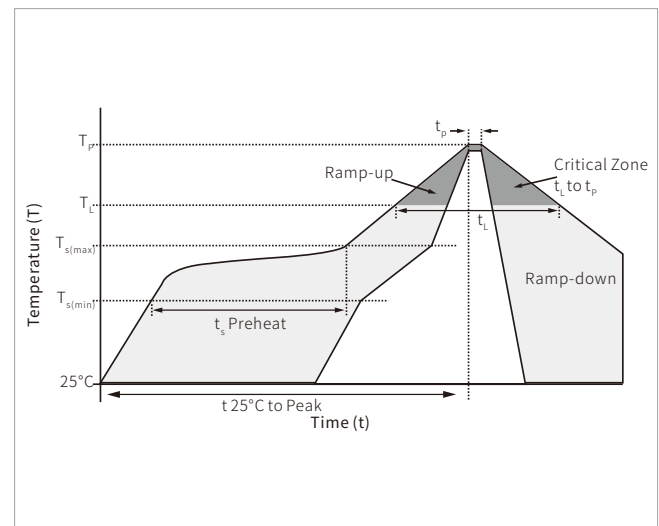
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Stand-off Voltage				5	V
V_{BR}	Reverse Breakdown Voltage	$I_T=1mA$	6			V
I_R	Reverse Leakage Current	$V_{RWM}=5V$			0.1	μA
V_C	Clamping Voltage	$I_{pp}=1A, t_p=8/20\mu s$			13.5	V
V_C	Clamping Voltage	$I_{pp}=2A, t_p=8/20\mu s$			20	V
V_C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

CHARACTERISTIC CURVES

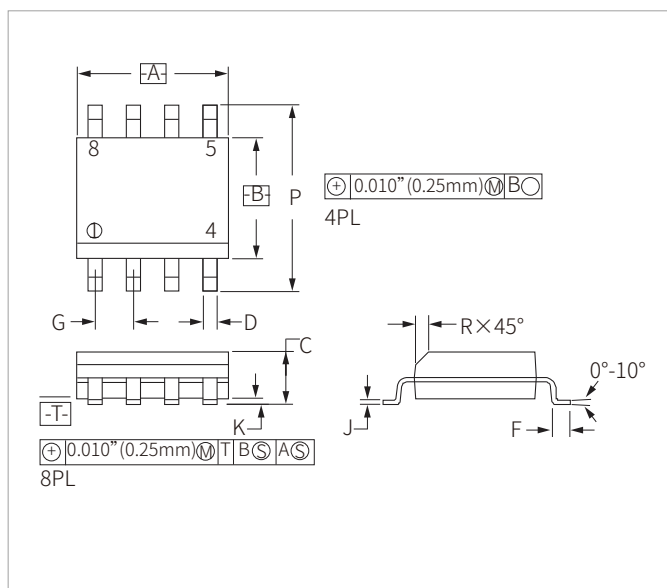


SOLDERING PARAMETERS

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

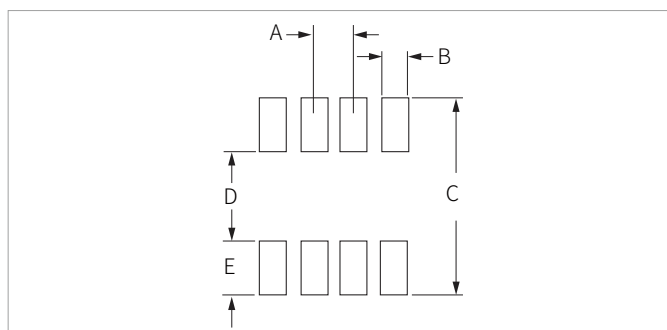


SOP-8 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.70	5.30	0.185	0.209
B	3.80	4.20	0.150	0.165
C	1.35	1.75	0.054	0.068
D	0.35	0.49	0.014	0.019
F	0.40	1.25	0.016	0.049
G	1.27BSC		0.050BSC	
J	0.18	0.25	0.007	0.009
K	0.10	0.25	0.004	0.008
P	5.80	6.20	0.229	0.244
R	0.25	0.50	0.010	0.019

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.14	1.40	0.045	0.055
B	0.64	0.89	0.025	0.035
C	6.22	-	0.245	-
D	3.94	4.17	0.155	0.165
E	1.02	1.27	0.040	0.050

ORDERING INFORMATION

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

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By QR Code

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