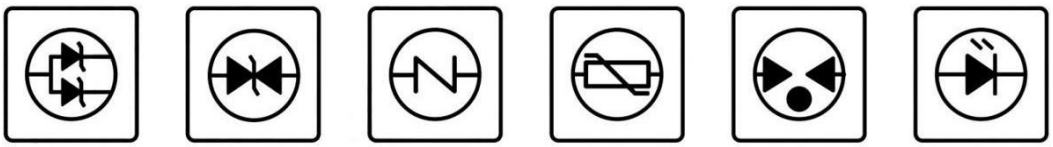
MSKSEMI 美森科
SEMICONDUCTOR



ESD05V88D-MS

Product specification

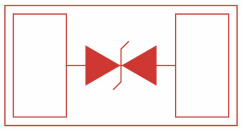
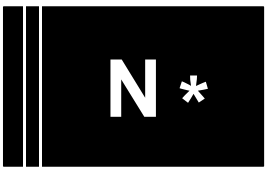
Features

- Ultra-low Capacitance 10 pF
- Low Clamping Voltage
- Small Body Outline Dimensions: 0.039x " 0.024 " (1.0 mm x0.60 mm)
- Low Body Height: 0.019 " (0.5 mm)
- Stand−off Voltage: 5.0V
- Low Leakage
- Response Time is Typically < 1 ns
- IEC61000−4−2 Level 4 ESD Protection for data lines
- These are Pb−Free Devices

Applications

- 10/100/1000 Mbits/s Ethernet
- FireWire
- Display ports
- MDDI ports
- Digital Visual Interface (DVI)
- Cellular handsets & accessories
- Computer and peripherals

Reference News

PACKAGE OUTLINE	Circuit Diagram	Marking
 DFN1006-2		

Maximum Rating @ Ta=25℃ unless otherwise specified

Symbol	Parameter		Ratings	Units
ESD	IEC 61000-4-2 (HBM-ESD)	Contact	25	KV
		Air	25	
T_L	Lead Soldering Temperature		260(10sec.)	℃
T_J	Operating Temperature		-55 to +125	℃
T_{STG}	Storage Temperature		-55 to +150	℃

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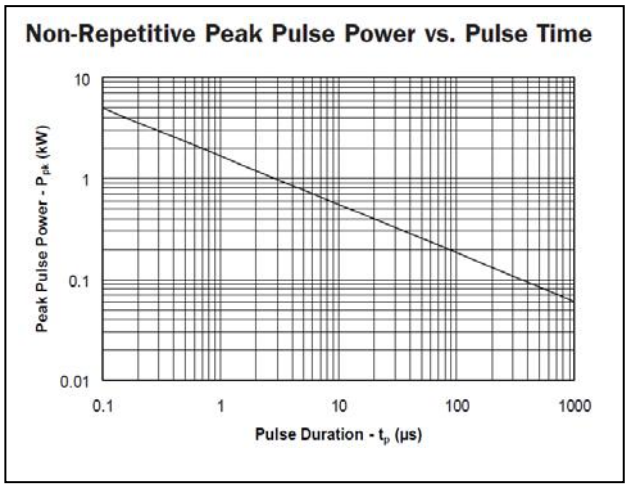
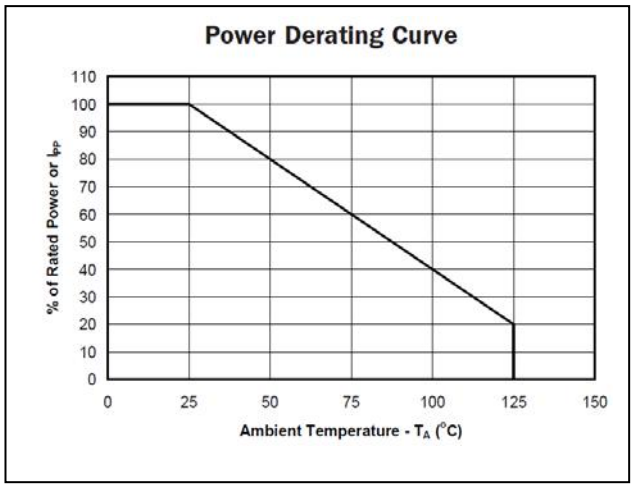
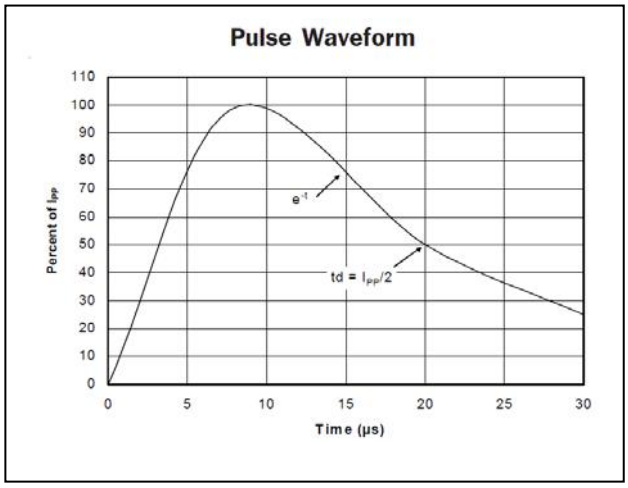
Electrical Characteristics@ Ta=25℃ unless otherwise

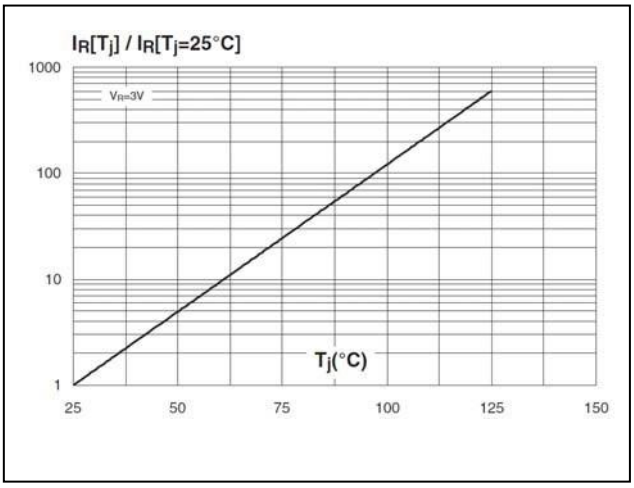
Parameter	V_{RWM} @ I_R		V_{BR}@ImA	V_C@1A	V_C@I_{PP}		C_J
	V	μA	V	V	V	A	pF
		MAX	MIN	MAX	MAX		MAX
ESD05V88D-MS	5	0.5	6.3	11	12	8	10

TypicalCharacteristics@Ta=25℃ unlessotherwisespecified









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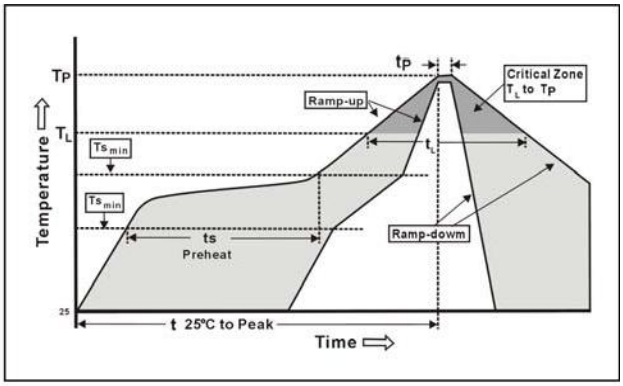
Soldering Parameters

Reflow Condition		Fb – Free assembly
Pre Heat	-Temperature Min ($T_{s(Min)}$)	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
	-Temperature (t_L)	60 – 150 seconds
Peak Temperature (T_p)		$250^{+0/-5}$ °C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-dowm Rate		6°C/second Max
Time 25°C to peak Temperature (T_p)		8 minutes Max.
Do not exceed		260°C



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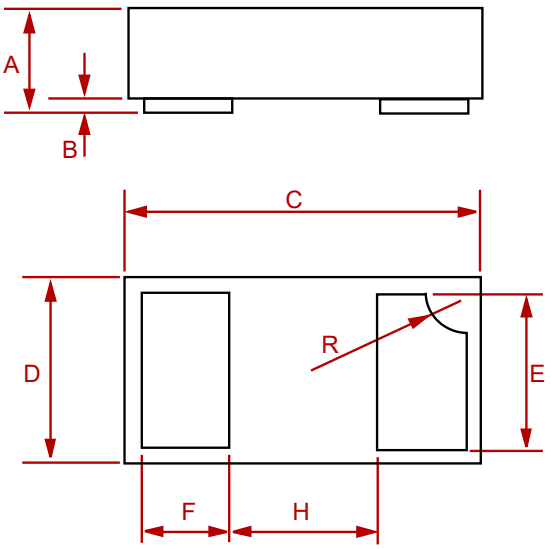
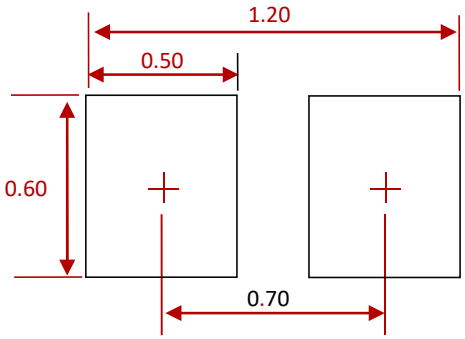
PACKAGE MECHANICAL DATA



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
ESD05V88D-MS	DFN1006	10000

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