

MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

Product data sheet

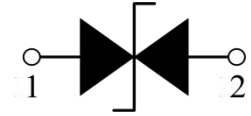
Specification Features

- Small Body Outline Dimensions:
nom 0.039" x 0.024" (1.0x0.6 mm)
- Low Body Height: nom 0.019" (0.5 mm)
- Low Capacitance 15 pF
- Low Clamping Voltage
- Reverse Working (Stand-off) Voltage: 5V
- Low Leakage
- Response Time is Typically < 1 ns
- IEC61000-4-2 Level 4 ESD Protection
- This is a Pb-Free Device

Pin Description



Schematic Diagram



DFN1006P2X

Mechanical Characteristics:

- CASE: Void-free, transfer-molded, thermosetting plastic Epoxy Meets UL 94 V-0
- LEAD FINISH: NiPdAu
- MOUNTING POSITION: Any
- QUALIFIED MAX REFLOW TEMPERATURE: 260°C
- Device Meets MSL 1 Requirements
- RoHS/WEEE Compliant
- Marking: Marking code

Applications

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Portable Instrumentation
- Digital Cameras
- Peripherals
- MP3 Players

ELECTRICAL CHARACTERISTICS

P/N	V_{RWM} (V)	$I_{R1}(\mu A)$ @ V_{RWM}	$I_{R2}(\mu A)$ @ $V_R=3.5V$	V_{BR} (V) @ I_T (Note 2)		I_T	V_C (V) @ $I_{PP} = 1 A$ (Note 3)	V_C (V) @ $MAX I_{PP}$ (Note 3)	$I_{PP}(A)$ (Note 3)	$P_{PK}(W)$ (Note 3)	C (pF)
	Max	Max	Max	Min	Max		mA	Max			
AZ5725-01F-MS	5.0	0.5	0.3	5.6	8.0	1.0	9.8	12.5	5.5	69	15

Maximum Ratings

Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Contact		±30	kV
Peak Power Per 8 x 20µs Waveform	P_{PK}	70	W
Total Power Dissipation on FR-5 [®] Board @ $T_A = 25^\circ C$	P_D	300	mW
Junction and Storage Temperature Range	T_J, T_{stg}	-55 to +150	°C
Lead Solder Temperature - Maximum (10 Second Duration)	T_L	260	°C

Electrical Parameter

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T

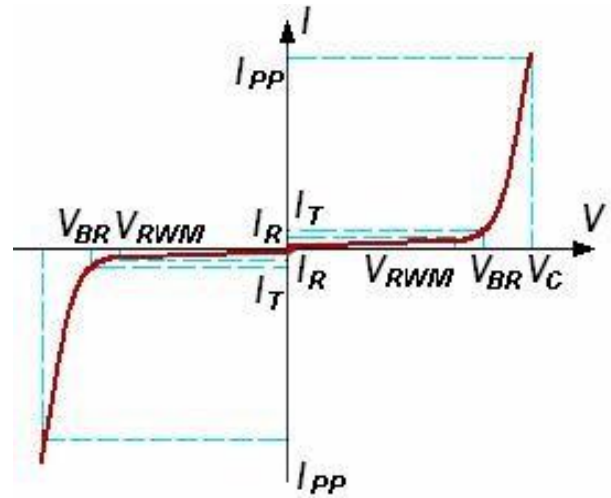


FIG1: Pulse Waveform

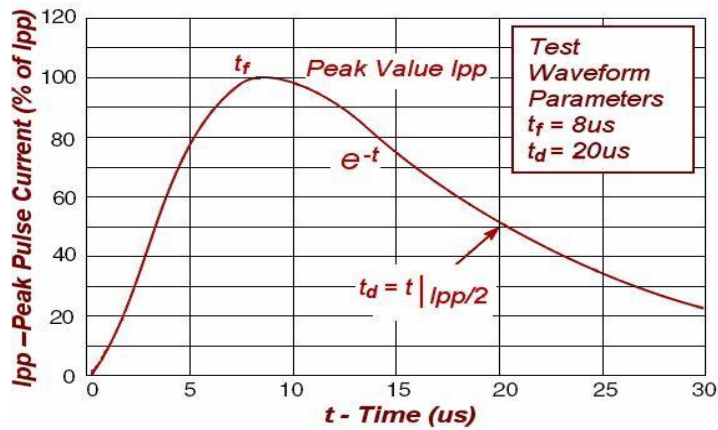
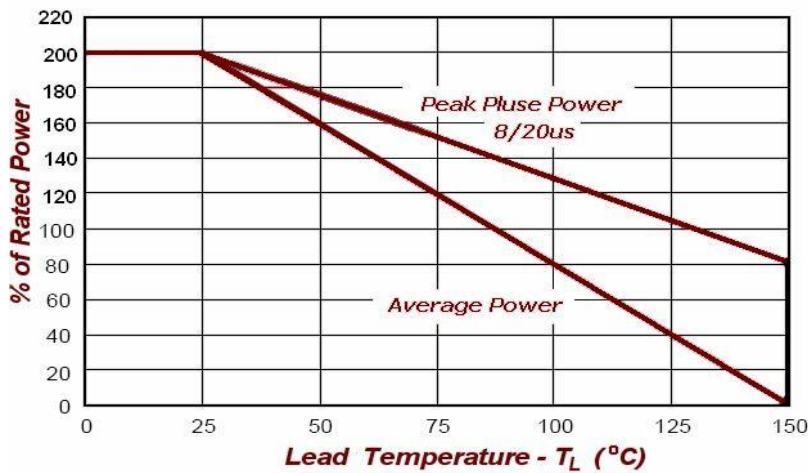
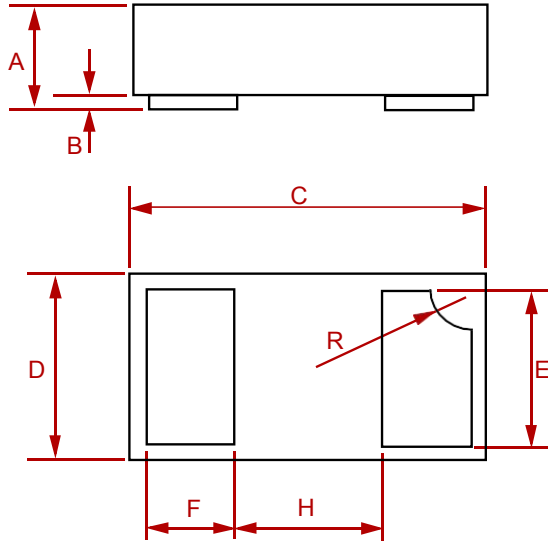


FIG2: Power Derating

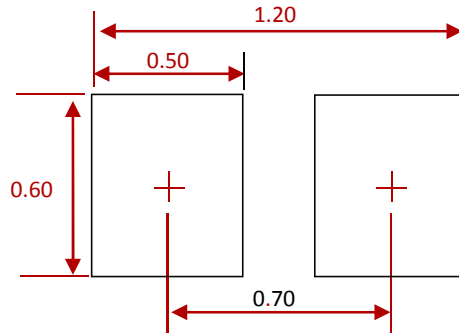


PACKAGE MECHANICAL DATA



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
AZ5725-01F-MS	DFN1006P2X	10000

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