

FEATURES

- Low Clamping Voltage: $V_C=22V@I_{PP}=125A$
- Reverse Working (Stand-off) Voltage: 7.0 V
- Low Leakage
- Response Time is Typically $< 1\text{ ns}$
- IEC61000-4-2 Level 4 ESD Protection

APPLICATIONS

- Mobile Internet Devices (MID) and portable devices
- TVs and monitors
- PAD
- Cellular handsets and accessories
- Set-top boxes and game consoles
- Peripherals



DFN1610



Schematic Symbol

IEC COMPATIBILITY

- IEC61000-4-2 (ESD) $\pm 30kV$ (air), $\pm 30kV$ (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)

APPROVALS

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

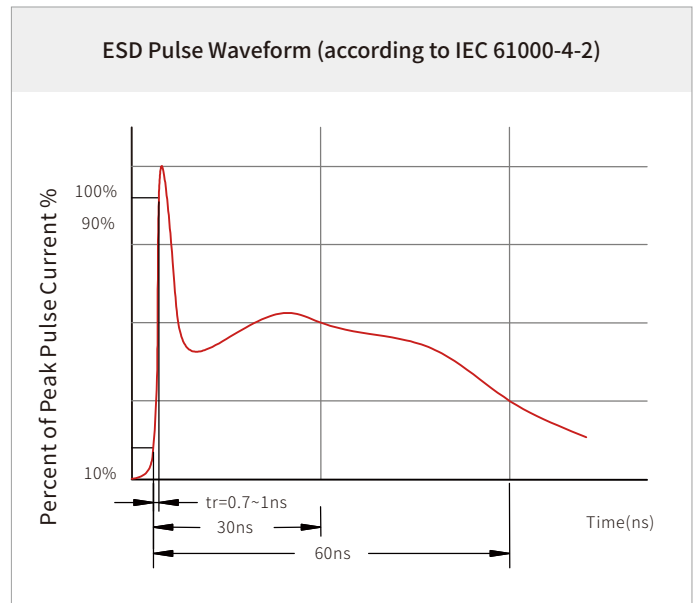
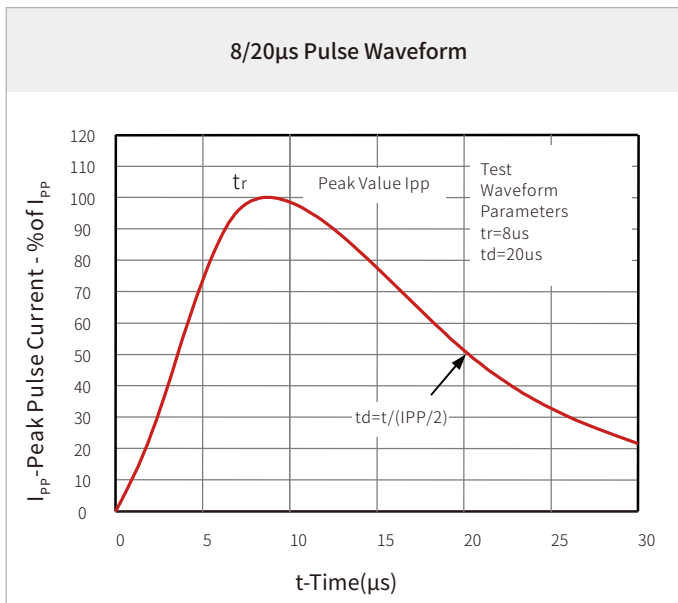
THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
P_{PP}	Peak Pulse Power (tp=8/20μs waveform)	2750	Watts
T_J	Operating Temperature Range	-55 to +125	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

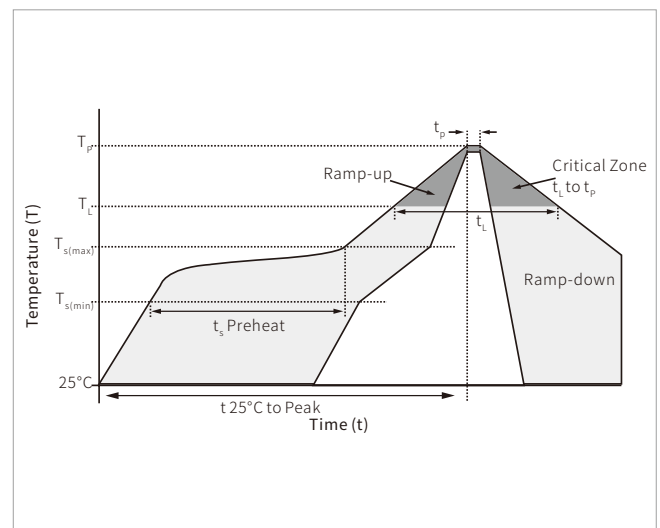
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Stand-off Voltage				7.0	V
V_{BR}	Reverse Breakdown Voltage	$I_T=1mA$	7.6		9.8	V
I_R	Reverse Leakage Current	$V_R=7.0V$			0.5	μA
V_F	Forward Voltage	$I_F=10mA$			1.2	V
V_C	Clamping Voltage	$I_{PP}=125A, tp=8/20\mu s$			22	V
I_{PP}	Peak Pulse Current	tp=8/20μs			125	A
C_J	Junction Capacitance	$V_R=0V, f=1MHz$			800	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



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By QR Code

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