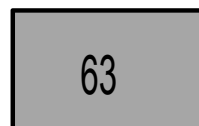


Features

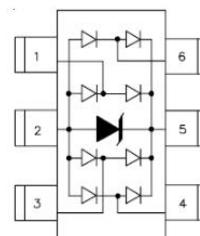
70W (8/20 μ s) Peak Pulse Power
Low Capacitance ESD Protection
SOT-363 Package
RoHS Compliant
Matte Tin Lead finish (Pb-Free)
Protect Four High Speed Data Lines and Vcc
Meet IEC61000-4-2 Level 4:
Contact Discharge > 8kV
Air Discharge > 15kV



PIN Diagram

Applications

USB 2.0
USB OTG
SIM Ports
Gigabit Ethernet
Notebook Computers
Video Line Protection
Digital Video Interface (DVI)
IEEE 1394 Firewires Ports
Monitors and Flat Panel Displays



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Value	Unit
PPK	Peak Pulse Power	70	W
IPP	Peak Pulse Current	4.5	A
VESD (Contact)	Contact ESD Voltage per IEC61000-4-2	20	kV
VESD (Air)	Air ESD Voltage per IEC61000-4-2	20	kV
TJ	Junction Temperature	-55 to +125	°C
TSTG	Storage Temperature	-55 to +150	°C

Electrical Characteristics ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
VRWM	Reverse Working Peak Voltage				5	V
VBR	Reverse Breakdown Voltage	$I_T = 1\text{mA}$	6			V
IR	Reverse Leakage Current	$VRWM = 5\text{V}$			3	μA
VC	Clamping Voltage	$I_{PP} = 1\text{A} (8/20\mu\text{s})$			12	V
VC	Clamping Voltage	$I_{PP} = 4.5\text{A} (8/20\mu\text{s})$			18	V
CJ	Capacitance	$VR = 0\text{V}, f = 1\text{MHz}$ Between I/O pins			0.4	pF
CJ	Capacitance	$VR = 0\text{V}, f = 1\text{MHz}$ Any I/O to ground			1	pF

RATING AND CHARACTERISTIC CURVES

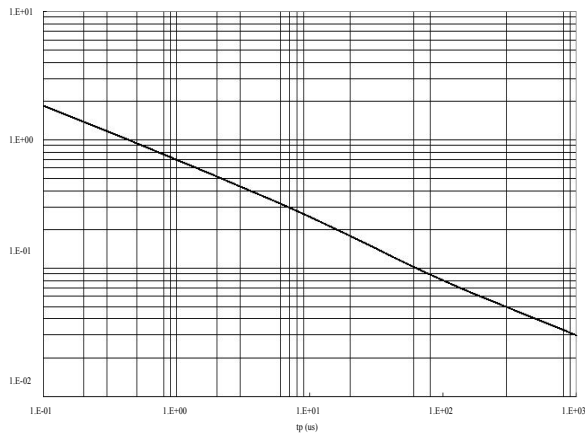


Figure 1. Peak Pulse Power Derating

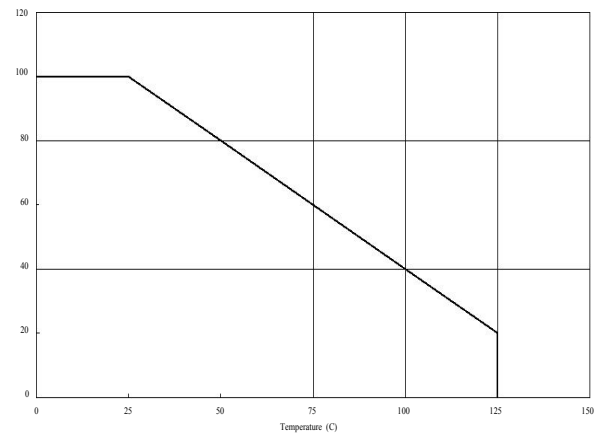


Figure 2. Peak Pulse Power Derating vs Temperature

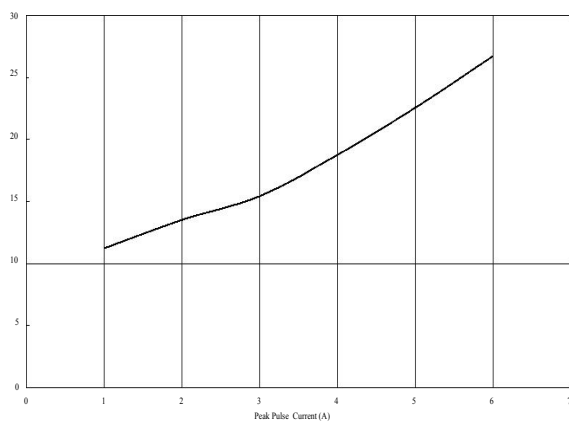


Figure 3. Peak Pulse Current vs Clamping Voltage

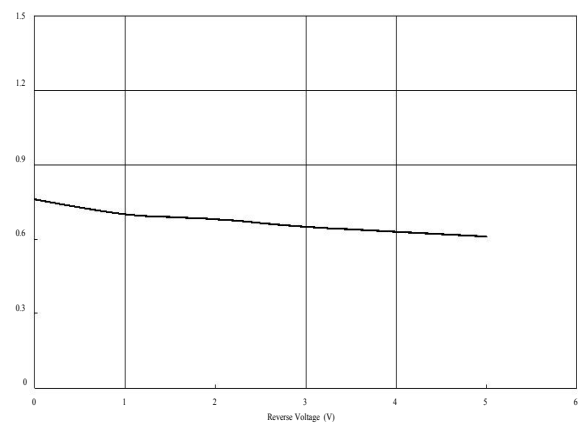
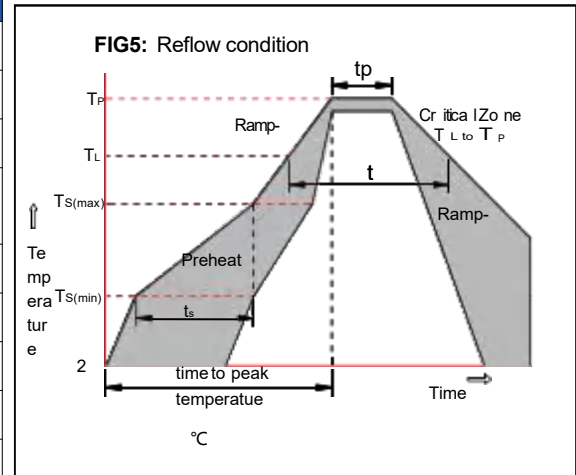


Figure 4. Reverse Voltage vs Capacitance

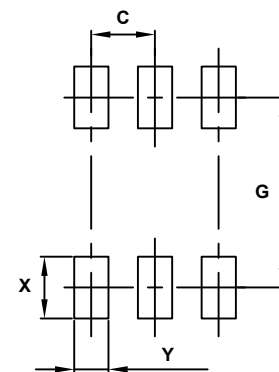
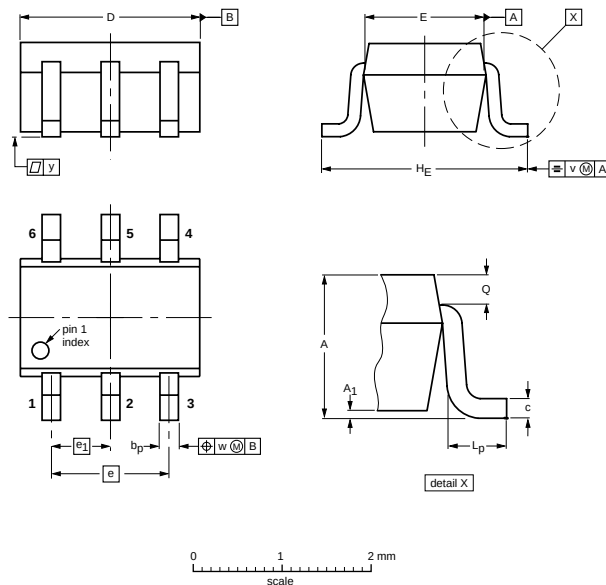
Soldering parameters

Reflow Condition		Pb-Free assembly (see as below)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150 °C
	-Temperature Max($T_{s(max)}$)	+200 °C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3 °C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3 °C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217 °C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5) °C
Time within 5 °C of actual Peak Temp (t_P)		30 secs. Max
Ramp-down Rate		6 °C/sec. Max
Time 25 °C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260 °C



Package Dimensions & Suggested Pad Layout

SOT-363



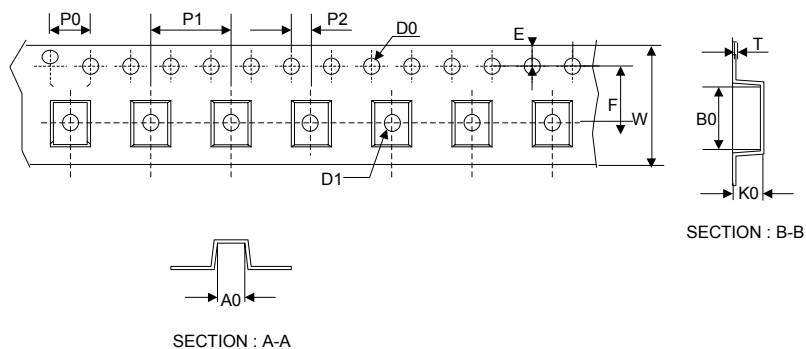
Dimensions	Value (in mm)
C	0.65
G	1.90
X	0.85
Y	0.40

DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w	y
mm	1.1 0.8	0.1	0.30 0.20	0.25 0.10	2.2 1.8	1.35 1.15	1.3	0.65	2.2 2.0	0.45 0.15	0.25 0.15	0.2	0.2	0.1

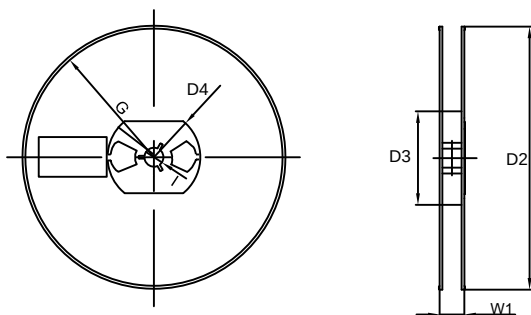
Tape & reel specification

Tape



Symbol	Dimension (mm)
P0	4.00±0.20
P1	4.00±0.20
P2	2.00±0.20
D0	1.55±0.20
D1	1.00±0.20
E	1.55±0.25
F	3.60±0.20
W	8.00±0.20
A0	3.00±0.20
B0	3.00±0.20
K0	1.30±0.20
T	0.20±0.20
D2	177.0±5.0
D3	55Min.
D4	R24.6±2.0
G	R82.0±2.0
I	13.0±2.0
W1	10.20±3.0

7" Reel



Quantity: 3000PCS