Features

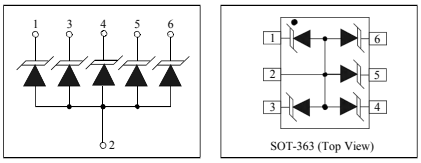
- ◇ 100W (8/20μs) Peak Pulse Power
- ◇ ESD and Latch-Up Protection
- ◇ SOT-363 Package
- ◇ RoHS Compliant
- ◇ Matte Tin Lead finish (Pb-Free
  Protect Five I/O Lines
- ◇ Meet IEC61000-4-2 Level 4:
  Contact Discharge > 20kV Air
  Discharge > 20kV

5C

Applications

- ◇ Peripherals
- ◇ Audio Players
- ◇ Digital Cameras
- ◇ Cordless Phones
- ◇ Portable Instrumentation
- ◇ Notebooks and Handhelds
- ◇ Personal Digital Assistants (PDA's)
- ◇ Cellular Handsets and Accessories





Schematic & PIN Configuration

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

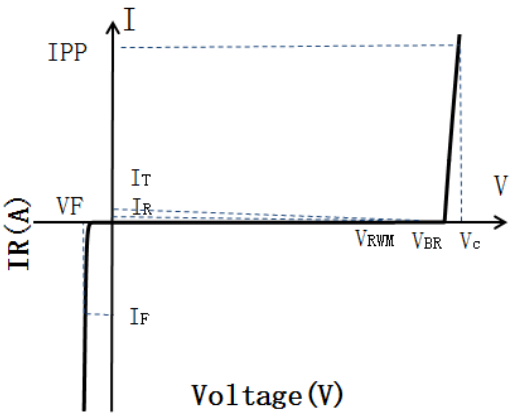
Symbol	Parameter	Value	Unit
P_{PK}	Peak Pulse Power	100	W
I_{PP}	Peak Pulse Current	6	A
V_{ESD} (Contact)	Contact ESD Voltage per IEC61000-4-2	20	kV
V_{ESD} (Air)	Air ESD Voltage per IEC61000-4-2	20	kV
TJ	Junction Temperature	-55 to +125	℃
TSTG	Storage Temperature	-55 to +150	℃

Electrical Characteristics (T_a=25℃unless otherwise noted)

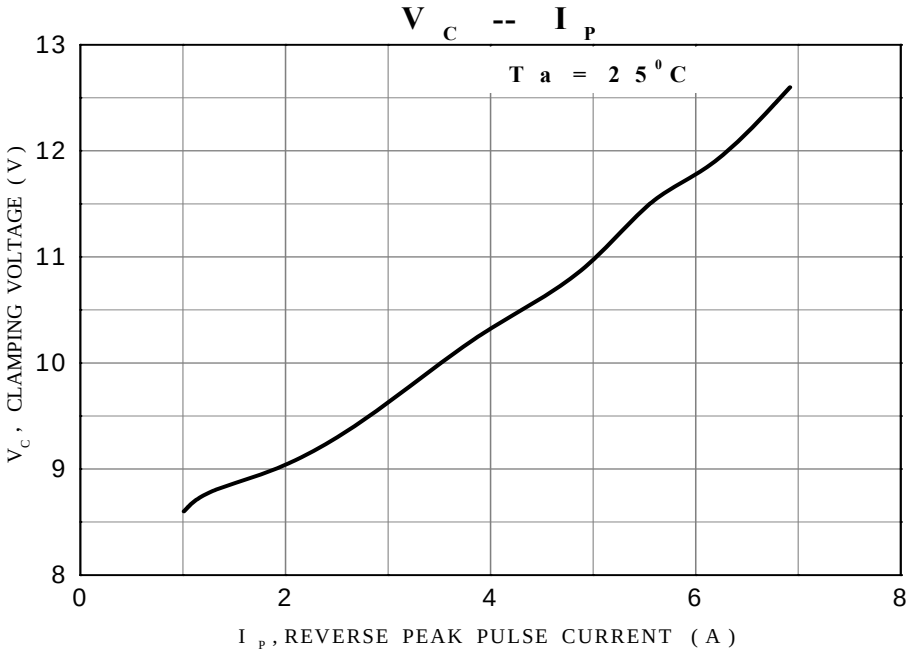
Symbol	Parameter	Conditions	Min	Typ	Max	Unit
VRWM	Reverse Working Peak Voltage				5	V
VBR	Reverse Breakdown Voltage	IT = 1mA	6		8	V
IR	Reverse Leakage Current	VRWM = 5V			5	μA
VC	Clamping Voltage	IPP = 1A (8/20μs)			10	V
VC	Clamping Voltage	IPP = 6A (8/20μs)			18	V
CJ	Capacitance	VR = 0V, f = 1MHz		50		pF

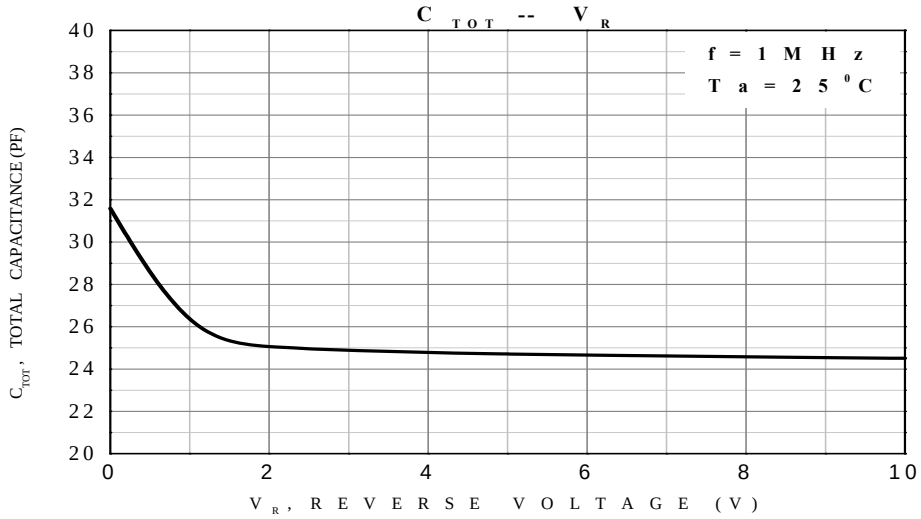
Electrical Parameters (TA = 25°C unless otherwise noted)

Symbol	Parameter
IT	Test Current
IPP	Maximum Reverse Peak Pulse Current
Vc	Clamping Voltage @Ic



RATING AND CHARACTERISTIC CURVES

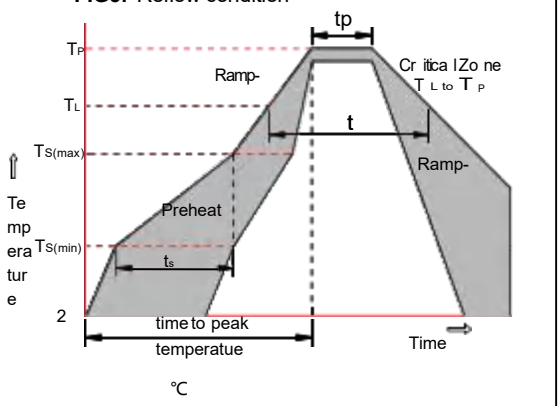




Soldering parameters

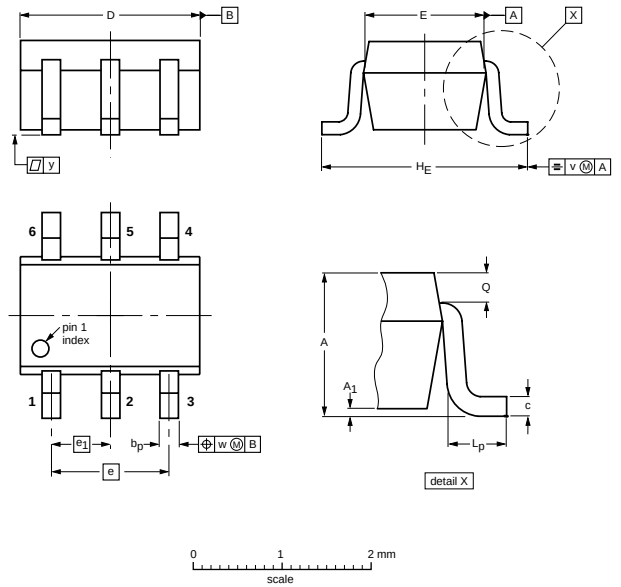
Reflow Condition		Pb-Free assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150℃
	-Temperature Max($T_{s(max)}$)	+200℃
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3℃/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3℃/sec. Max
Reflow	-Temperature(T_L)(Liquid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

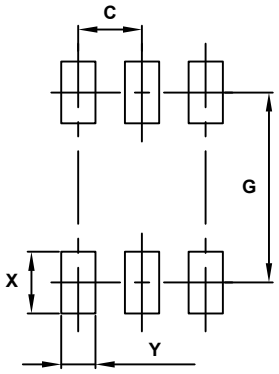
FIG5: Reflow condition



Package Dimensions & Suggested Pad Layout

SOT-363





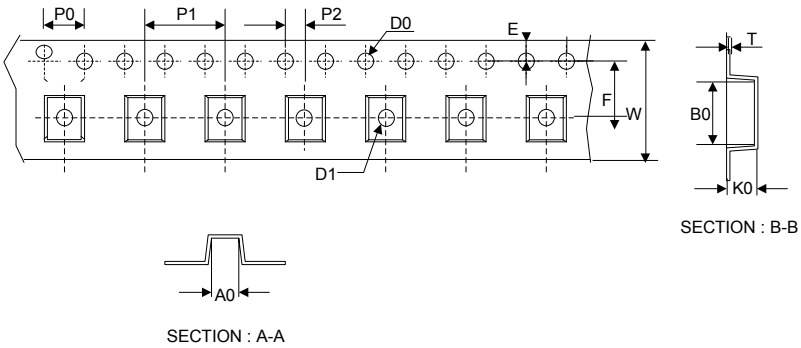
Dimensions	Value (in mm)
C	0.65
G	1.90
X	0.85
Y	0.40

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

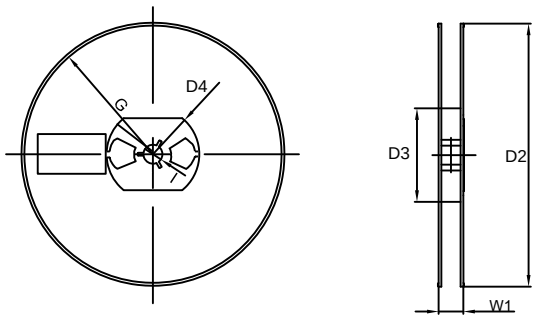
Tape & rell specification

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

7” Reel



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
Quantity: 3000PCS	