

Absolute Maximum Ratings

Symbol	Parameter	Value	Units
I_{PP}	Peak Current ($t_p=8/20\mu s$)	10	A
P_{PK}	Peak Pulse Power ($t_p=8/20\mu s$)	150	W
T_{OP}	Operating Temperature	-40 to 125	°C
T_{STOR}	Storage Temperature	-55 to 150	°C

CAUTION: Stresses above those listed in "Absolute Maximum Ratings" may cause permanent damage to the component. This is a stress only rating and operation of the component at these or any other conditions above those indicated in the operational sections of this specification is not implied.

Electrical Characteristics ($T_{OP}=25^{\circ}C$)

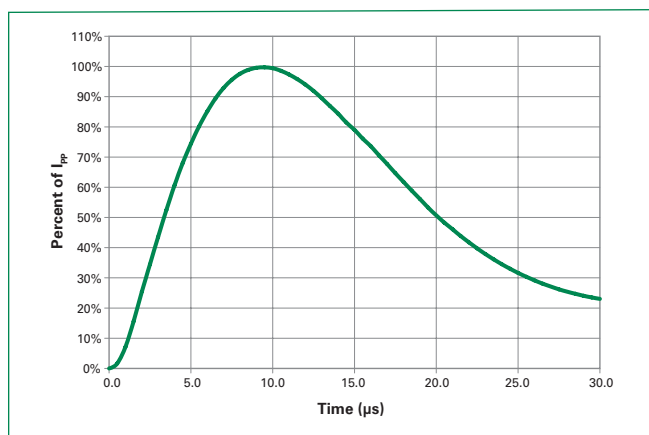
Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Reverse Standoff Voltage	V_{RWM}	$I_R = 1\mu A$, I/O to GND			6	V
Breakdown Voltage	V_{BR}	$I_R = 1mA$, I/O to GND	6	8.5		V
Reverse Leakage Current	I_{LEAK}	$V_R=5V$, I/O to GND		0.1	0.5	μA
Clamp Voltage ¹	V_C	$I_{PP}=5A$, $t_p=8/20\mu s$, I/O to GND		11.7	13	V
		$I_{PP}=8A$, $t_p=8/20\mu s$, I/O to GND		12.5	14	V
		$I_{PP}=10A$, $t_p=8/20\mu s$, I/O to GND		13.2	15	V
Dynamic Resistance ²	R_{DYN}	TLP, $t_p=100ns$, I/O to GND		0.28		Ω
ESD Withstand Voltage ¹	V_{ESD}	IEC 61000-4-2 (Contact Discharge)	± 30			kV
		IEC 61000-4-2 (Air Discharge)	± 30			kV
Diode Capacitance ¹	$C_{I/O-GND}$	Reverse Bias=0V, $f=1MHz$, I/O to GND		1	3	pF
	$C_{I/O-I/O}$	Reverse Bias=0V, $f=1MHz$, I/O to I/O		0.5		pF

Notes:

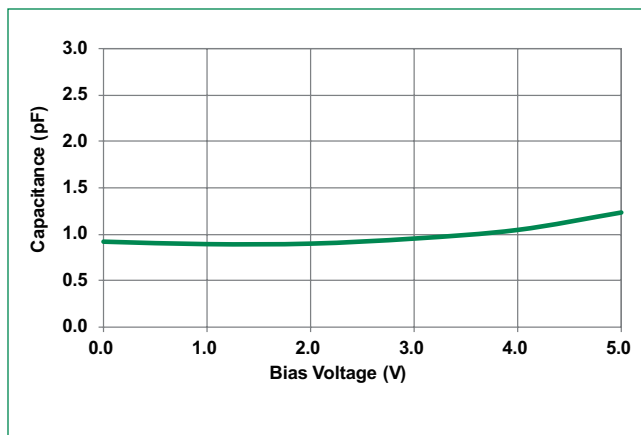
1. Parameter is guaranteed by design and/or component characterization.

2. Transmission Line Pulse (TLP) test setting : Std.TDR(50 Ω), $t_p=100ns$, $tr=0.2ns$ ITLP and VTLP averaging window: start $t_1=70ns$ to end $t_2=80ns$

8/20 μs Pulse Waveform



Capacitance vs. Reverse Bias

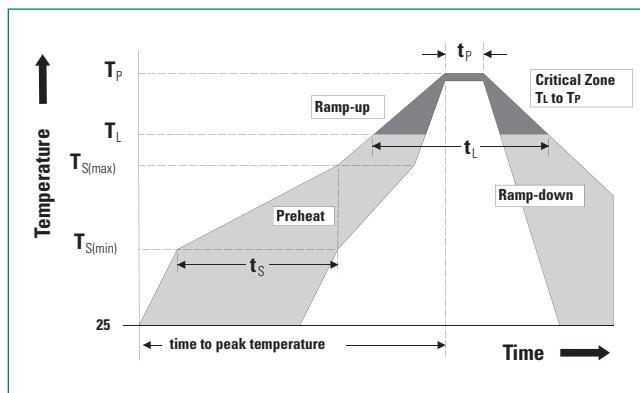


Peak Pulse Current - I_{pp} (A)	Clamp Voltage - V_c (V)
1.0	9.5
2.0	10.0
3.0	10.5
4.0	11.0
5.0	11.5
6.0	12.0
7.0	12.5
8.0	13.0
9.0	13.5
10.0	14.0

[illegible]

Soldering Parameters

Reflow Condition		Pb – 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)		260 ^{+0/-5} °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



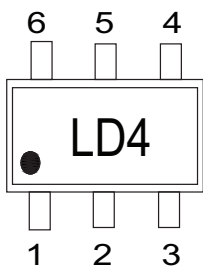
Ordering Information

Part Number	Package	Min. Order Qty.
SRV05-4HTG-D	SOT23-6	3000

Product Characteristics

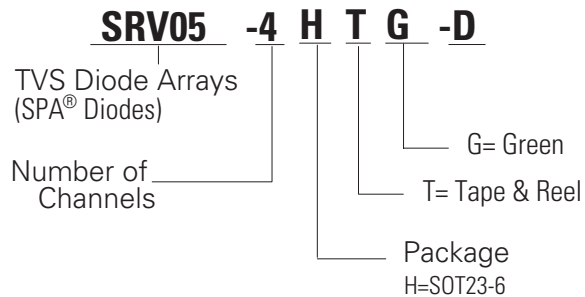
Lead Plating	Matte Tin
Lead Material	Copper Alloy
Lead Conpanarity	0.004 inches(0.102mm)
Substrate Material	Silicon
Body Material	Molded Compound
Flammability	UL Recognized compound meeting flammability rating V-0

Part Marking System

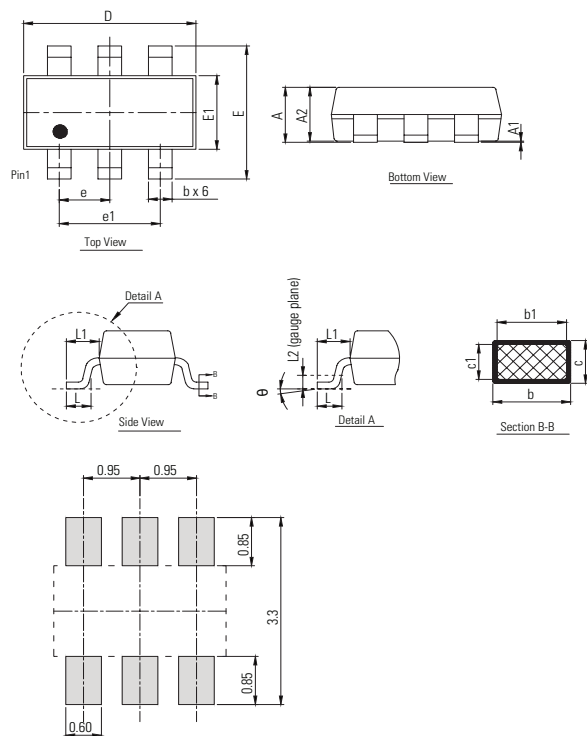


L : Part code
 D : Assembly code
 4 : Number of channel

Part Numbering System



Package Dimensions - SOT23-6

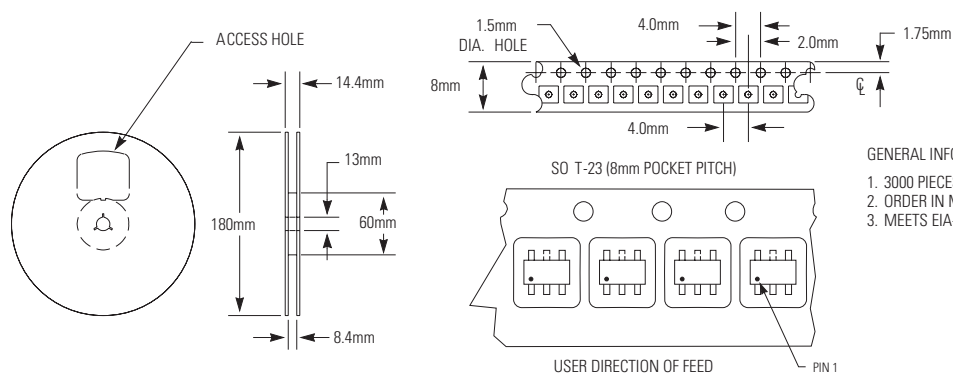


Recommended soldering pad layout (unit: mm)
Drawing#: H02-B

Symbol	Millimeters			Inches		
	Min	Nom	Max	Min	Nom	Max
A	-	-	1.45	-	-	0.057
A1	0.00	-	0.15	0.000	-	0.006
A2	0.90	1.15	1.30	0.035	0.045	0.051
b	0.30	-	0.50	0.012	-	0.020
b1	0.30	0.40	0.45	0.012	0.016	0.018
c	0.08	-	0.22	0.003	-	0.009
c1	0.08	0.13	0.20	0.003	0.005	0.008
D	2.70	2.90	3.05	0.106	0.114	0.120
E	2.60	2.80	3.00	0.102	0.110	0.118
E1	1.45	1.60	1.75	0.057	0.063	0.069
e	0.95 BSC			0.037 BSC		
e1	1.90 BSC			0.075 BSC		
L	0.30	0.50	0.60	0.012	0.020	0.024
L1	0.60 REF			0.024 REF		
L2	0.25 BSC			0.010 BSC		
θ	0°	4°	8°	0°	4°	8°

Embossed Carrier Tape & Reel Specification – SOT23-6

8mm TAPE AND REEL



GENERAL INFORMATION

1. 3000 PIECES PER REEL.
2. ORDER IN MULTIPLES OF FULL REELS ONLY.
3. MEETS EIA-481 REVISION "A" SPECIFICATIONS.