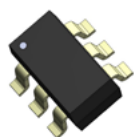


STS234XXXUXXX

TVS Diode array ESD suppressor



Product features

- Protects four I/O lines
- Low clamping voltage
- Low operating voltage
- Low capacitance
- Meets moisture sensitivity level (MSL) 3
- Molding compound flammability rating: UL 94V-0
- Termination finish: Tin

Applications

- USB power and data line protection
- Digital video

Absolute maximum ratings

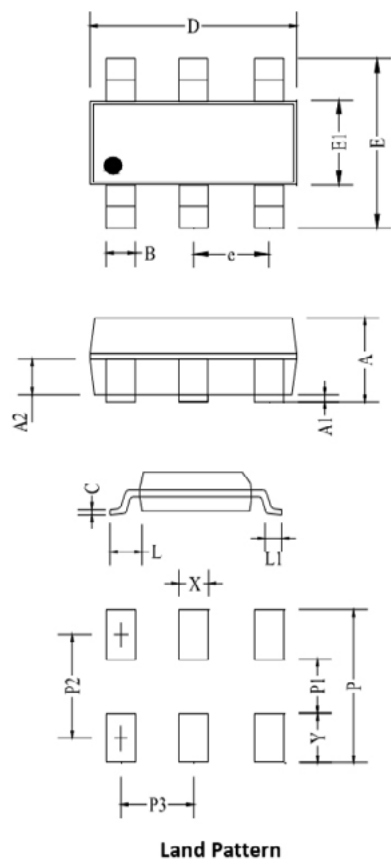
(+25 °C, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	STS234033U280	STS234050U160	STS234050UL30	STS234050UL65	STS234050U150	Unit
Peak pulse power dissipation on 8/20 μs waveform	P_{PP}	500	300	100	100	500		W
Peak pulse current on 8/20 μs waveform	I_{PP}	-	-	8	-	-		A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	+/-30	+/-30	+/-20	+/-30	+/-30		kV
ESD per IEC 61000-4-2 (Contact)		+/-30	+/-30	+/-20</				

STS234050UL30

Parameter	Test condition	Minimum	Typical	Maximum	Symbol (Units)
Reverse working voltage	-	-	-	5.0	V_{RWM} (V)
Reverse breakdown voltage	$I_T = 1$ mA	6.0	-	-	V_{BR} (V)
Reverse leakage current	$V_{RWM} = 5$ V	-	-	1	I_R (μ A)
Forward voltage	$I_T = 10$ mA	-	0.8	1.0	V_F (V)
Clamping voltage	$I_{PP} = 1$ A, $t_p = 8/20$ μ s	-	9.5	11	V_C (V)
	$I_{PP} = 5$ A, $t_p = 8/20$ μ s	-	12.		

Mechanical parameters, pad layout- mm/inches

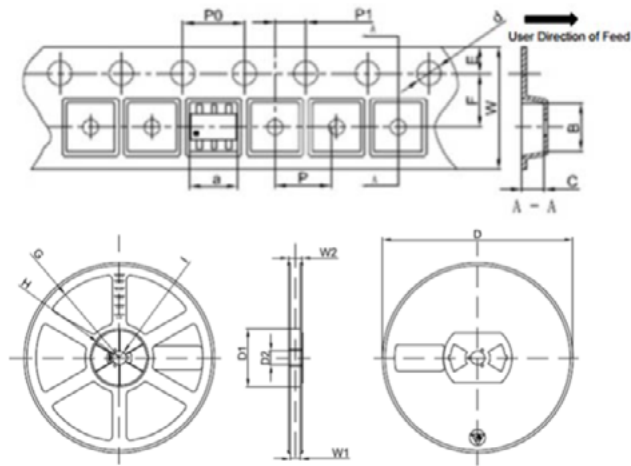


Dimension	Millimeters		Inches	
	Minimum	Maximum	Minimum	Maximum
A	0.90	1.45		

Packaging information mm/inches

Drawing not to scale.

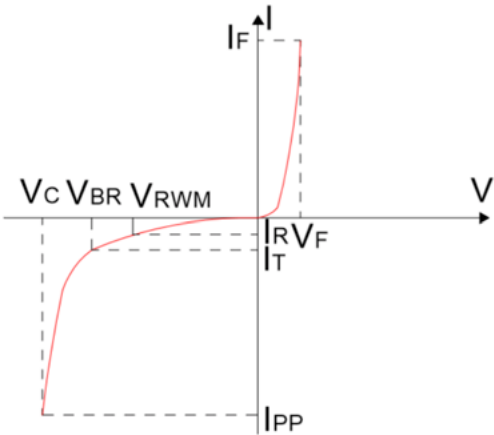
Supplied in tape and reel packaging, 3,000 parts per 7" diameter reel (EIA-481 compliant)



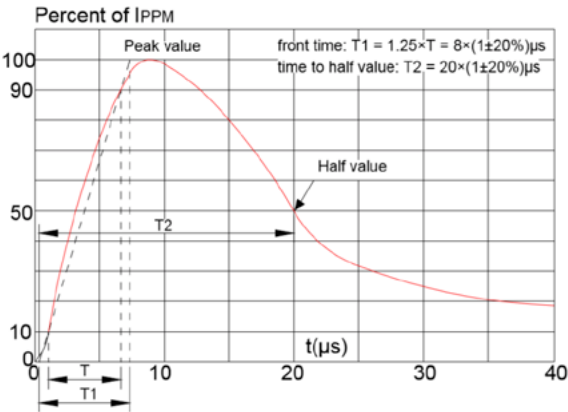
Symbol	Millimeter	Inches
	Typ.	Typ.
a	3.17	0.125
B	3.	

Ratings and V-I characteristic curves (+25 °C unless otherwise noted)

V- I curve characteristics (Uni-directional)



Pulse waveform (8/20 μ s)



Solder reflow profile

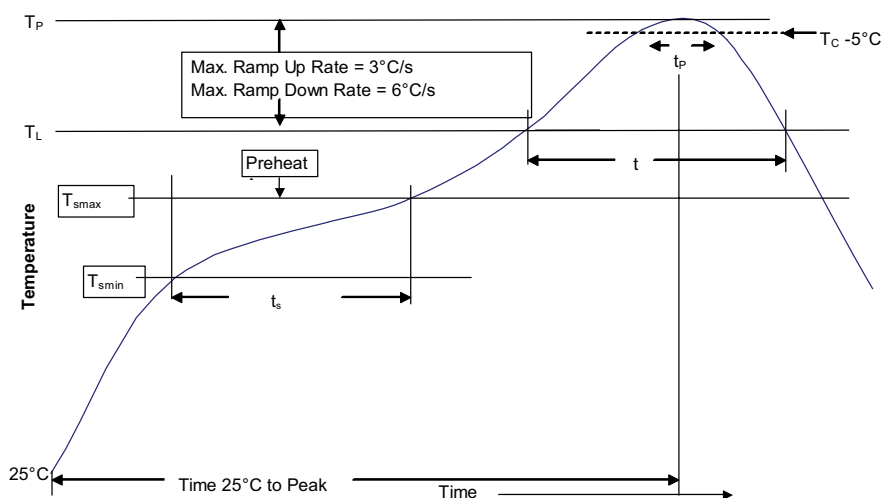


Table 1 - Standard SnPb solder (T_C)

Package thickness	Volume mm ³ <350	Volume mm ³ ≥350
<2.5		

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Eaton:

[STS234050U160](#) [STS234050UL30](#) [STS234050UL65](#) [STS234033U280](#) [STS234050U150](#)