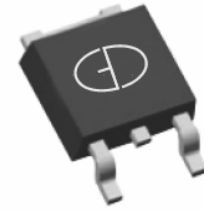


## Feature

- Negative temperature coefficient capability to protect LED at high temperature
- ESD(HBM) > 8KV
- TO-252 Package
- High dynamic impedance



TO-252 (DPAK)

## Description

S2H1002A4 Series are current limiting diodes, which are designed to supply constant current to an electric circuit, even when power supply voltage fluctuations or load impedance fluctuations occurs. S2H1002A3 Series are used for current stabilization and current limiting.



Schematic Diagram

## Absolute Maximum Ratings

( $T_A=25^{\circ}\text{C}$  unless otherwise specified)

Parameter	Symbol	Value	Unit
Power Dissipation	$P_D$	1.2	W
Max. Work Voltage	$V_{MAX}$	120	V
Junction Temperature	$T_J$	150	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 to +150	$^{\circ}\text{C}$
Typical Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	104	$^{\circ}\text{C/W}$

## Electrical Characteristics

( $T_A=25^{\circ}\text{C}$  unless otherwise specified)

P/N	Rate Current I (mA)			Threshold Voltage VK(V)	
	Min	Typ	Max	Max	Typ
S2H1002A4-183	17	18	19	8	4.5
S2H1002A4-203	19	20	21	8	4.5
S2H1002A4-223	21	22	23	8	4.5
S2H1002A4-283	27	28	29	8	4.5
S2H1002A4-303	29	30	31	8	4.5
S2H1002A4-323	31	32	33	8	4.5
S2H1002A4-3852	37	38.5	40	8	4.5
S2H1002A4-4152	40	41.5	43	8	4.5

**Typical Characteristic Curves**

Fig.1 I-V Curve

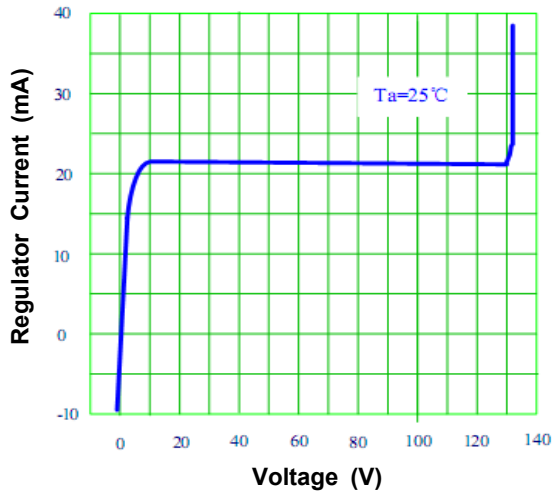
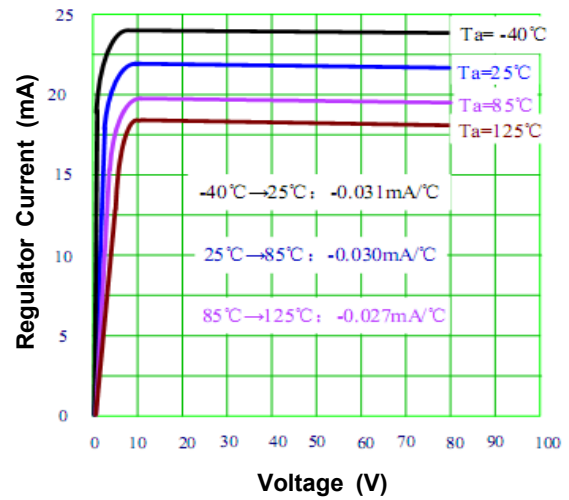
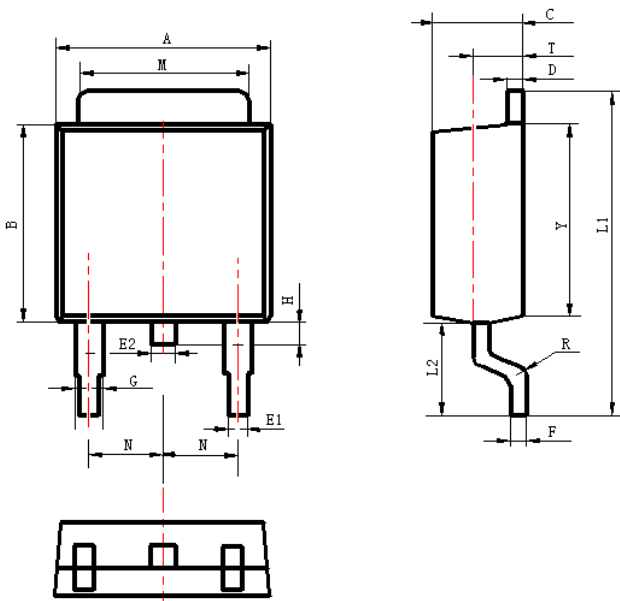


Fig.2 I-V Temperature Curve



**Product Dimension**



Dim	mm	
	min	max
A	6.30	6.80
B	5.20	6.20
C	2.10	2.50
D	0.40	0.60
E1	0.60	0.80
E2	0.70	0.90
F	0.40	0.60
G	0.80	1.00
L1	9.70	10.20
L2	2.70	3.10
H	0.60	0.90
M	5.10	5.50
N	2.09	2.49
R	0.3	
T	1.40	1.60
Y	5.10	6.30

**Order Information**

Device	Package	Carrier	Quantity	HSF Status
S2H1002A4 Series	TO-252	Tape & Reel	2500pcs/Reel	RoHS Compliant