

DIO7527

5.5V Current Limited Load Switch

Features

- Input voltage range: 2.7V to 5.5V
- 70mΩ typical $R_{DS(ON)}$
- 70μA quiescent current
- Under-Voltage Lockout
- High precision over current trigger point
- Open-drain Fault Flag Pin
- Output Reverse-Voltage Protection
- 6kV output pin ESD
- Available in Package of SOT23-6,MSOP-8, EP-MSOP-8

Descriptions

The DIO7527 is a current limited P-channel MOSFET power switch, which designed for high side load switch applications.

An open-drain flag output is also available to indicate fault condition, including over current, thermal shutdown, input UVLO and output reverse-voltage condition.

The load-switch product family from DIOO including almost all industry standard. Please contact our sales if you are interested.

Application

- Hot Swap Supplies
- Notebook Computers
- Peripheral Ports
- Personal Communication Devices

Block Diagram

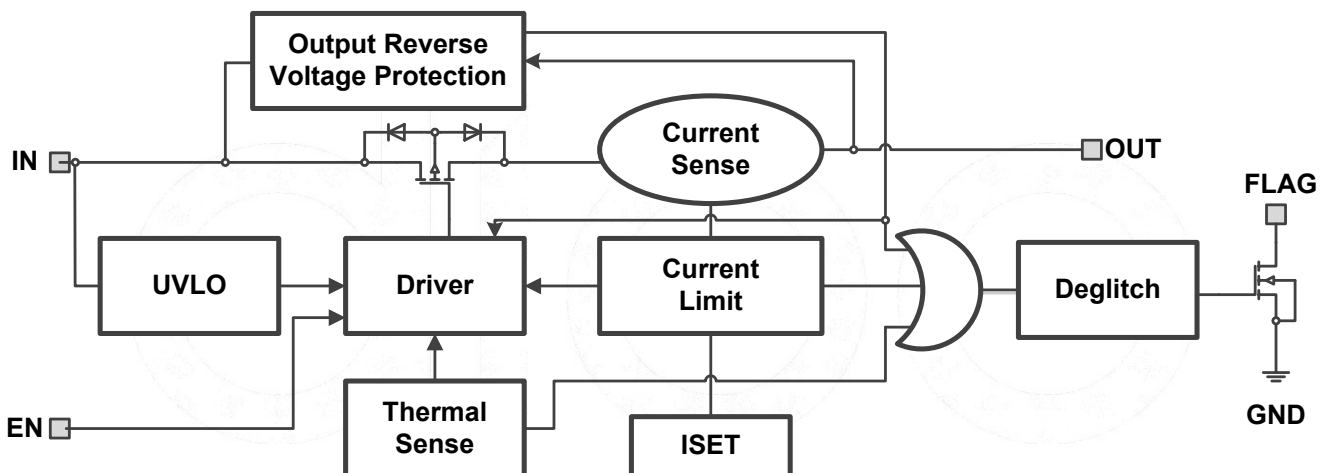


Figure 1 Functional Block Diagram



DIO7527

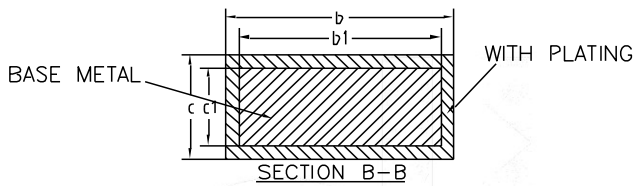
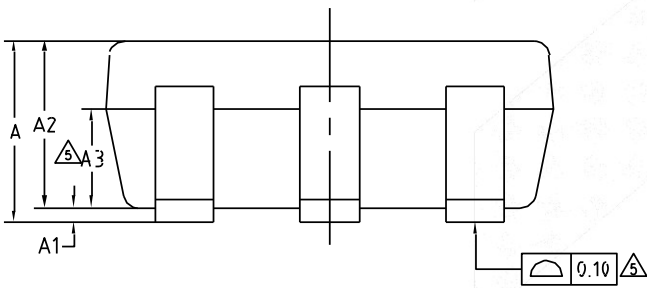
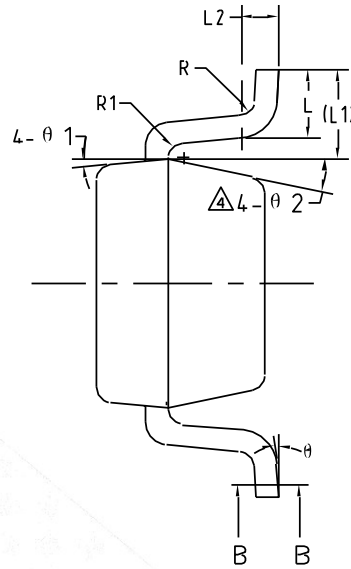
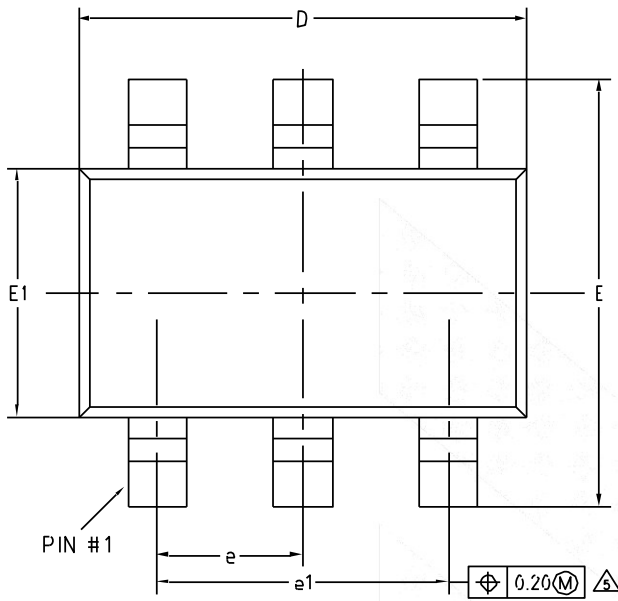
5.5V Current Limited Load Switch

Ordering Information

Order Part Number	Top Marking	Enable	Output Shutdown Resistor	T _A	Package	
DIO7527AST6	YW7A	Active High	Yes	-40 to +85°C	SOT23-6	Tape & Reel, 3000
DIO7527BST6	YW7B	Active Low	Yes	-40 to +85°C	SOT23-6	Tape & Reel, 3000
DIO7527CST6	YW7C	Active High	No	-40 to +85°C	SOT23-6	Tape & Reel, 3000
DIO7527DST6	YW7D	Active Low	No	-40 to +85°C	SOT23-6	Tape & Reel, 3000
DIO7527AMP8	D27A	Active High	Yes	-40 to +85°C	MSOP-8	Tape & Reel, 3000
DIO7527BMP8	D27B	Active Low	Yes	-40 to +85°C	MSOP-8	Tape & Reel, 3000
DIO7527CMP8	D27C	Active High	No	-40 to +85°C	MSOP-8	Tape & Reel, 3000
DIO7527DMP8	D27D	Active Low	No	-40 to +85°C	MSOP-8	Tape & Reel, 3000
DIO7527AXM8	D27A	Active High	Yes	-40 to +85°C	EP-MSOP-8	Tape & Reel, 3000
DIO7527BXM8	D27B	Active Low	Yes	-40 to +85°C	EP-MSOP-8	Tape & Reel, 3000
DIO7527CXM8	D27C	Active High	No	-40 to +85°C	EP-MSOP-8	Tape & Reel, 3000
DIO7527DXM8	D27D	Active Low	No	-40 to +85°C	EP-MSOP-8	Tape & Reel, 3000

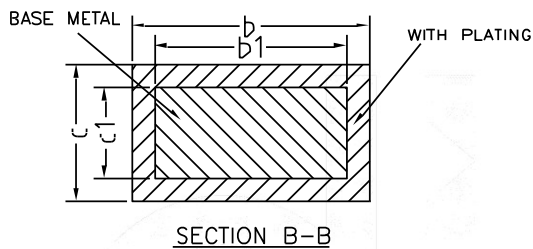
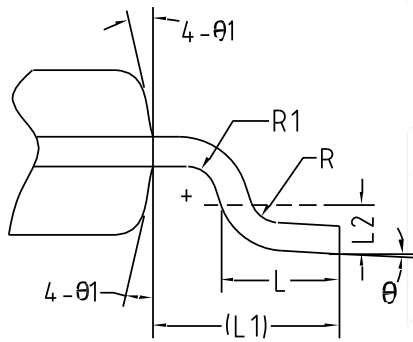
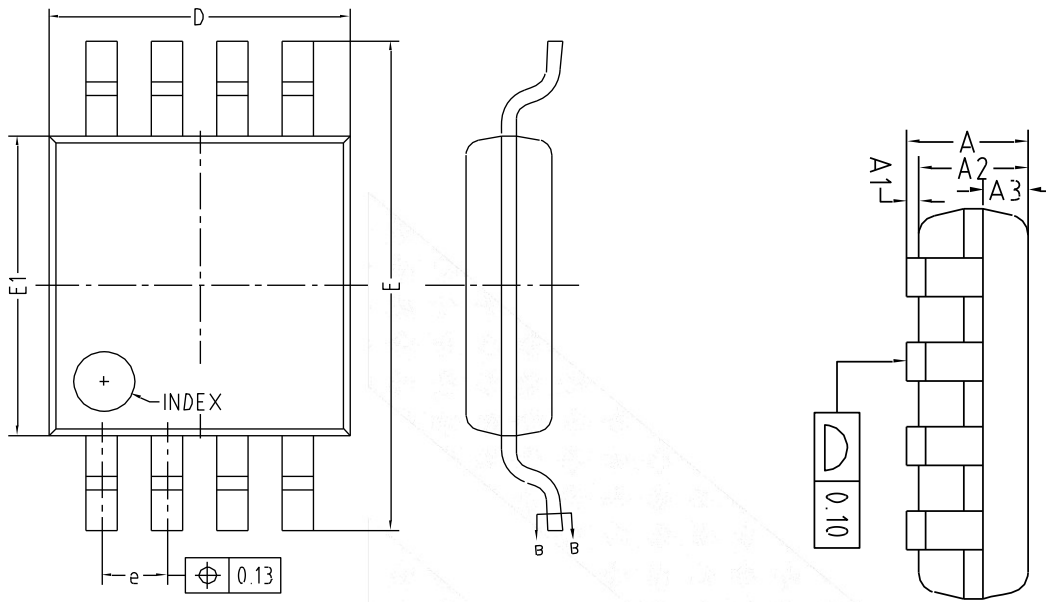


Physical Dimensions: SOT-23-6



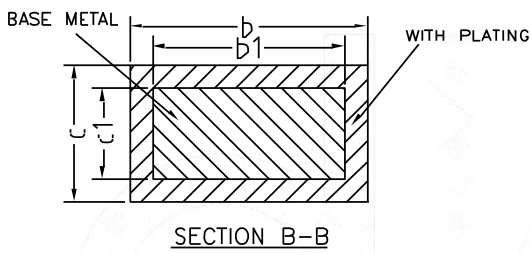
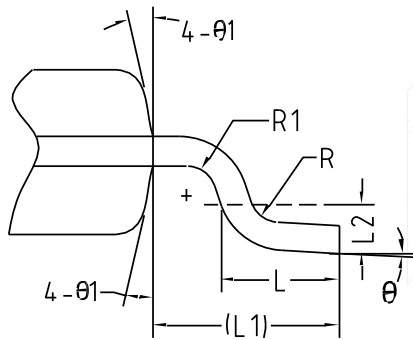
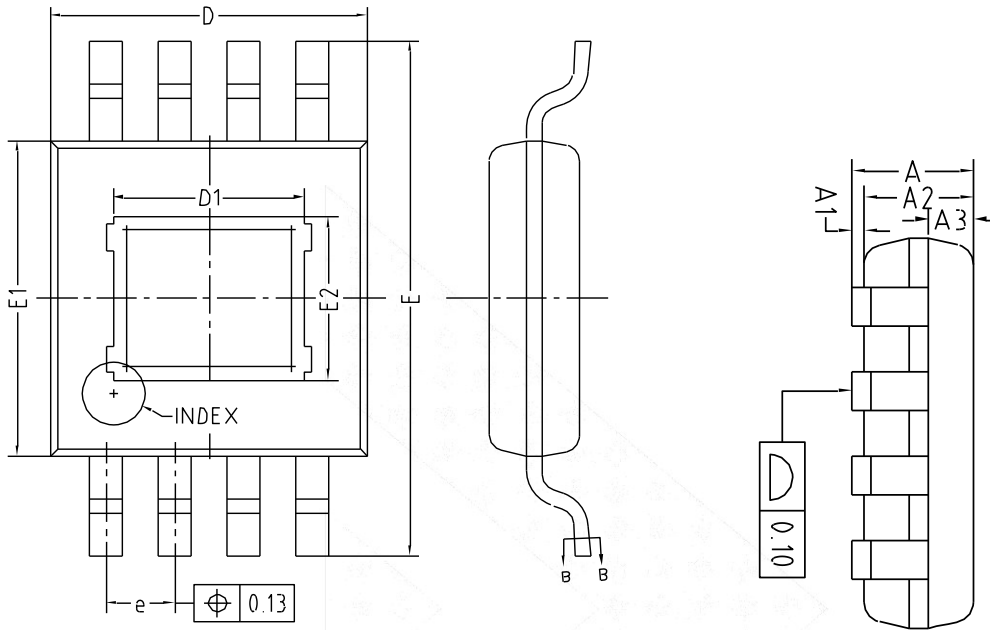
COMMON DIMENSIONS (UNITS OF MEASURE=MILLIMETER)			
Symbol	MIN	NOM	MAX
A	-	-	1.25
A1	0	-	0.15
A2	1.00	1.10	1.20
A3	0.60	0.65	0.70
b	0.36	-	0.50
b1	0.36	0.38	0.45
c	0.14	-	0.20
c1	0.14	0.15	0.16
D	2.826	2.926	3.026
E	2.60	2.80	3.00
E1	1.526	1.626	1.726
e	0.90	0.95	1.00
e1	1.80	1.90	2.00
L	0.35	0.45	0.60
L1	0.59REF		
L2	0.25BSC		
R	0.10	-	-
R1	0.10	-	0.20
θ	0°	-	8°
θ1	3°	5°	7°
θ2	6°	-	14°

Physical Dimensions: MSOP-8



COMMON DIMENSIONS (UNITS OF MEASURE=MILLIMETER)			
Symbol	MIN	NOM	MAX
A	-	-	1.10
A1	0	-	0.15
A2	0.75	0.85	0.95
A3	0.25	0.35	0.39
b	0.28	-	0.37
b1	0.27	0.30	0.33
c	0.15	-	0.20
c1	0.14	0.15	0.16
D	2.90	3.00	3.10
E	4.70	4.90	5.10
E1	2.90	3.00	3.10
e	0.55	0.65	0.75
L	0.40	0.60	0.80
L1	0.95REF		
L2	0.25BSC		
R	0.07	-	-
R1	0.07	-	-
θ	0°	-	8°
θ1	9°	12°	15°

Physical Dimensions: EP-MSOP-8



COMMON DIMENSIONS (UNITS OF MEASURE=MILLIMETER)			
Symbol	MIN	NOM	MAX
A	-	-	1.10
A1	0	-	0.15
A2	0.75	0.85	0.95
A3	0.25	0.35	0.39
b	0.28	-	0.37
b1	0.27	0.30	0.33
c	0.15	-	0.20
c1	0.14	0.15	0.16
D	2.90	3.00	3.10
D1	0.75	-	2.50
E	4.70	4.90	5.10
E1	2.90	3.00	3.10
E2	0.75	-	2.50
e	0.55	0.65	0.75
L	0.40	0.60	0.80
L1	0.95REF		
L2	0.25BSC		
R	0.07	-	-
R1	0.07	-	-
θ	0°	-	8°
θ1	9°	12°	15°

CONTACT US

Dioo is a professional design and sales corporation for high-quality and performance analog semiconductors. The company focuses on industry markets, such as, cell phone, handheld products, laptop, and medical equipment and so on. Dioo's product families include analog signal processing and amplifying, LED drivers and charger IC. Go to <http://www.dioo.com> for a complete list of Dioo product families.

For additional product information, or full datasheet, please contact with our Sales Department or Representatives.

