

# DC/DC Converters – S6-S/D1 series

1.5 WATT

Single / Dual Output

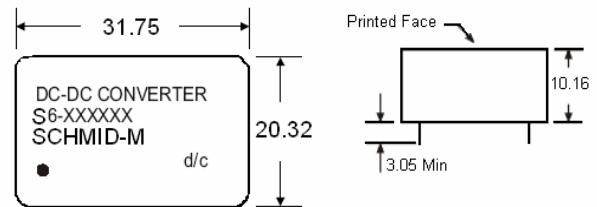
## FEATURES

- Wide 2:1 Input Range
- Full SMD Technology
- 1500 Vdc Isolation, Up to 3500 Vdc
- Operating Temperature Range - 40°C ~ 85°C
- Continuous Short Circuit Protection
- Efficiency up to 75 %
- Metal Case Standard, optional Plastic Case

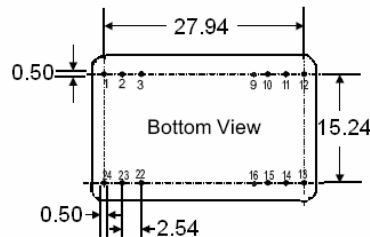
Model Number	Input Voltage Range(V)	Output Vdc	Output Current (mA)	Eff. @FL (%)
S6-123R3S1	9-18	3.3	454	72
S6-1205S1		5	300	74
S6-1209S1		9	167	75
S6-1212S1		12	125	75
S6-1215S1		15	100	75
S6-1224S1		24	63	75
S6-123R3D1	9-18	±3.3	±227	72
S6-1205D1		±5	±150	74
S6-1209D1		±9	±84	75
S6-1212D1		±12	±63	75
S6-1215D1		±15	±50	75
S6-1224D1		±24	±32	75
S6-243R3S1	18-36	3.3	454	72
S6-2405S1		5	300	74
S6-2409S1		9	167	75
S6-2412S1		12	125	75
S6-2415S1		15	100	75
S6-2424S1		24	63	75
S6-243R3D1	18-36	±3.3	±227	72
S6-2405D1		±5	±150	74
S6-2409D1		±9	±84	75
S6-2412D1		±12	±63	75
S6-2415D1		±15	±50	75
S6-2424D1		±24	±32	75
S6-483R3S1	36-72	3.3	454	72
S6-4805S1		5	300	74
S6-4809S1		9	167	74
S6-4812S1		12	125	74
S6-4815S1		15	100	74
S6-4824S1		24	63	74
S6-483R3D1	36-72	±3.3	±227	72
S6-4805D1		±5	±150	74
S6-4809D1		±9	±84	74
S6-4812D1		±12	±63	74
S6-4815D1		±15	±50	74
S6-4824D1		±24	±32	74

<b>Input specifications:</b>	
Input Reflected Ripple Current Filter:	35mA pk-pk, typ Pi Type
<b>Output specifications:</b>	
Voltage accuracy	±1%
Ripple & noise (at 20MHz BW)	60mV pk-pk
Line regulation	±0.5%
Load regulation	±0.5%
Temperature coefficient	out (±)3.3V models ±20% ±0.02%/°C
<b>General Specifications:</b>	
Switching Frequency	266 kHz, typ
I/O isolation voltage (3 sec)	1500~3500Vdc
	Metal Case 1000Vdc
Safety standard	IEC 60950-1:2001
<b>Environmental specifications:</b>	
Operating Temperature	-40°C ~ +85°C
Case temperature	100°C Max.
Storage Temperature	-40°C ~ +125°C
Cooling	Nature Convection
Humidity	95% rel H

## MECHANICAL DIMENSIONS 24 Pin DIL Package



PIN #	Single	Dual	Single-H	Dual-H
1	+Vin	+Vin	N.P.	N.P.
2	N.C.	-Vout	-Vin	-Vin
3	N.C.	Common	-Vin	-Vin
9	N.P.	N.P.	N.C.	Common
10	-Vout	Common	N.P.	N.P.
11	+Vout	+Vout	N.C.	-Vout
12	-Vin	-Vin	N.P.	N.P.
13	-Vin	-Vin	N.P.	N.P.
14	+Vout	+Vout	+Vout	+Vout
15	-Vout	Common	N.P.	N.P.
16	N.P.	N.P.	-Vout	Common
22	N.C.	Common	+Vin	+Vin
23	N.C.	-Vout	+Vin	+Vin
24	+Vin	+Vin	N.P.	N.P.



# DC/DC Converters – S6-S/D2 series

2 WATT

Single / Dual Output

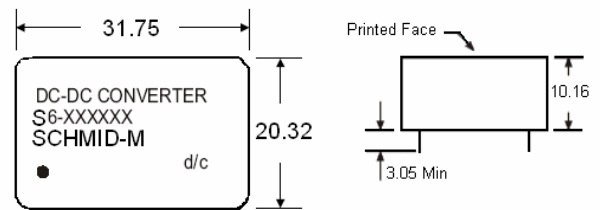
## FEATURES

- Wide 2:1 Input Range
- Full SMD Technology
- 1500 Vdc Isolation, Up to 3500 Vdc
- Operating Temperature Range - 40°C ~ 85°C
- Continuous Short Circuit Protection
- Efficiency up to 78 %
- Metal Case Standard, optional Plastic Case

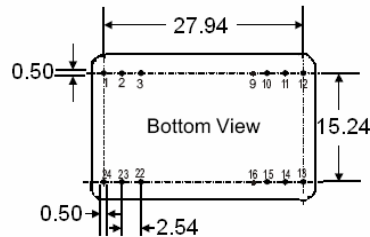
Model Number	Input Voltage Range(V)	Output Vdc	Output Current (mA)	Eff. @FL (%)
S6-123R3S2	9-18	3.3	600	74
S6-1205S2		5	400	75
S6-1209S2		9	222	76
S6-1212S2		12	167	76
S6-1215S2		15	133	76
S6-1224S2		24	83	76
S6-123R3D2	9-18	±3.3	±300	72
S6-1205D2		±5	±200	75
S6-1209D2		±9	±111	76
S6-1212D2		±12	±83	76
S6-1215D2		±15	±67	76
S6-1224D2		±24	±42	76
S6-243R3S2	18-36	3.3	600	76
S6-2405S2		5	400	78
S6-2409S2		9	222	78
S6-2412S2		12	167	78
S6-2415S2		15	133	78
S6-2424S2		24	83	78
S6-243R3D2	18-36	±3.3	±300	74
S6-2405D2		±5	±200	76
S6-2409D2		±9	±111	78
S6-2412D2		±12	±83	78
S6-2415D2		±15	±67	78
S6-2424D2		±24	±42	78
S6-483R3S2	36-72	3.3	600	74
S6-4805S2		5	400	75
S6-4809S2		9	222	75
S6-4812S2		12	167	75
S6-4815S2		15	133	75
S6-4824S2		24	83	75
S6-483R3D2	36-72	±3.3	±300	74
S6-4805D2		±5	±200	75
S6-4809D2		±9	±111	75
S6-4812D2		±12	±83	75
S6-4815D2		±15	±67	75
S6-4824D2		±24	±42	75

<b>Input specifications:</b>	
Input Reflected Ripple Current Filter:	35mA pk-pk, typ Pi Type
<b>Output specifications:</b>	
Voltage accuracy	±1%
Ripple & noise (at 20MHz BW)	60mV pk-pk
Line regulation	±0.5%
Load regulation	±0.5%
Temperature coefficient	out (±)3.3V models ±20% ±0.02%/°C
<b>General Specifications:</b>	
Switching Frequency	266 kHz, typ
I/O isolation voltage (3 sec)	1500~3500Vdc
	Metal Case 1000Vdc
Safety standard	IEC 60950-1:2001
<b>Environmental specifications:</b>	
Operating Temperature	-40°C ~ +85°C
Case temperature	100°C Max.
Storage Temperature	-40°C ~ +125°C
Cooling	Nature Convection
Humidity	95% rel H

## MECHANICAL DIMENSIONS 24 Pin DIL Package



PIN #	Single	Dual	Single-H	Dual-H
1	+Vin	+Vin	N.P.	N.P.
2	N.C.	-Vout	-Vin	-Vin
3	N.C.	Common	-Vin	-Vin
9	N.P.	N.P.	N.C.	Common
10	-Vout	Common	N.P.	N.P.
11	+Vout	+Vout	N.C.	-Vout
12	-Vin	-Vin	N.P.	N.P.
13	-Vin	-Vin	N.P.	N.P.
14	+Vout	+Vout	+Vout	+Vout
15	-Vout	Common	N.P.	N.P.
16	N.P.	N.P.	-Vout	Common
22	N.C.	Common	+Vin	+Vin
23	N.C.	-Vout	+Vin	+Vin
24	+Vin	+Vin	N.P.	N.P.



# DC/DC Converters – S6-S/D3 series

3 WATT

Single / Dual Output

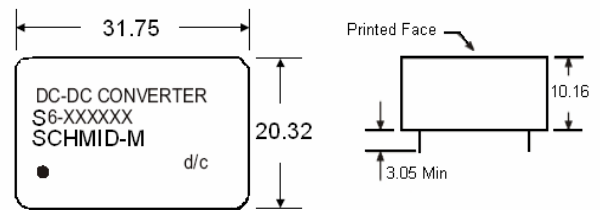
## FEATURES

- Wide 2:1 Input Range
- Full SMD Technology
- 1500 Vdc Isolation, Up to 3500 Vdc
- Operating Temperature Range - 40°C ~ 85°C
- Continuous Short Circuit Protection
- Efficiency up to 82 %
- Metal Case Standard, optional Plastic Case

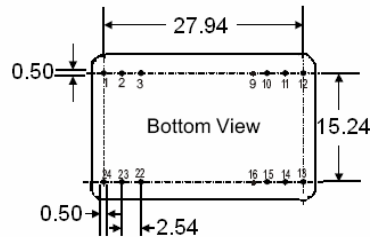
Model Number	Input Voltage Range(V)	Output Vdc	Output Current (mA)	Eff. @FL (%)
S6-123R3S3	9-18	3.3	900	72
S6-1205S3		5	600	76
S6-1209S3		9	333	78
S6-1212S3		12	250	80
S6-1215S3		15	200	80
S6-1224S3	24	125	80	
S6-123R3D3	9-18	±3.3	±450	72
S6-1205D3		±5	±300	76
S6-1209D3		±9	±167	80
S6-1212D3		±12	±125	80
S6-1215D3		±15	±100	80
S6-1224D3	±24	±63	80	
S6-243R3S3	18-36	3.3	900	72
S6-2405S3		5	600	76
S6-2409S3		9	333	78
S6-2412S3		12	250	80
S6-2415S3		15	200	82
S6-2424S3	24	125	82	
S6-243R3D3	18-36	±3.3	±450	72
S6-2405D3		±5	±300	78
S6-2409D3		±9	±167	80
S6-2412D3		±12	±125	82
S6-2415D3		±15	±100	82
S6-2424D3	±24	±63	82	
S6-483R3S3	36-72	3.3	900	72
S6-4805S3		5	600	76
S6-4809S3		9	333	78
S6-4812S3		12	250	80
S6-4815S3		15	200	80
S6-4824S3	24	125	80	
S6-483R3D3	36-72	±3.3	±450	72
S6-4805D3		±5	±300	76
S6-4809D3		±9	±167	78
S6-4812D3		±12	±125	80
S6-4815D3		±15	±100	80
S6-4824D3	±24	±63	80	

<b>Input specifications:</b>	
Input Reflected Ripple Current Filter:	35mA pk-pk, typ Pi Type
<b>Output specifications:</b>	
Voltage accuracy	±1%
Ripple & noise (at 20MHz BW)	60mV pk-pk
Line regulation	±0.5%
Load regulation	±0.5%
Temperature coefficient	out (±)3.3V models ±20% ±0.02%/°C
<b>General Specifications:</b>	
Switching Frequency	266 kHz, typ
I/O isolation voltage (3 sec)	1500~3500Vdc
Metal Case	1000Vdc
Safety standard	IEC 60950-1:2001
<b>Environmental specifications:</b>	
Operating Temperature	-40°C ~ +85°C
Case temperature	100°C Max.
Storage Temperature	-40°C ~ +125°C
Cooling	Nature Convection
Humidity	95% rel H

## MECHANICAL DIMENSIONS 24 Pin DIL Package



PIN #	Single	Dual	Single-H	Dual-H
1	+Vin	+Vin	N.P.	N.P.
2	N.C.	-Vout	-Vin	-Vin
3	N.C.	Common	-Vin	-Vin
9	N.P.	N.P.	N.C.	Common
10	-Vout	Common	N.P.	N.P.
11	+Vout	+Vout	N.C.	-Vout
12	-Vin	-Vin	N.P.	N.P.
13	-Vin	-Vin	N.P.	N.P.
14	+Vout	+Vout	+Vout	+Vout
15	-Vout	Common	N.P.	N.P.
16	N.P.	N.P.	-Vout	Common
22	N.C.	Common	+Vin	+Vin
23	N.C.	-Vout	+Vin	+Vin
24	+Vin	+Vin	N.P.	N.P.



# DC/DC Converters – S6-S/D4 series

4 WATT

Single / Dual Output

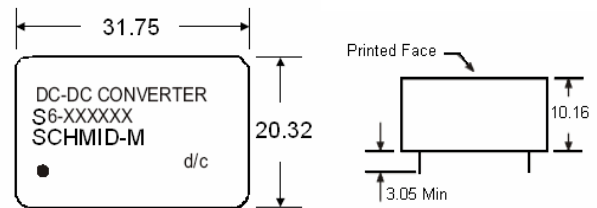
## FEATURES

- Wide 2:1 Input Range
- Full SMD Technology
- 1500 Vdc Isolation, Up to 3500 Vdc
- Operating Temperature Range - 40°C ~ 85°C
- Continuous Short Circuit Protection
- Efficiency up to 82 %
- Metal Case Standard, optional Plastic Case

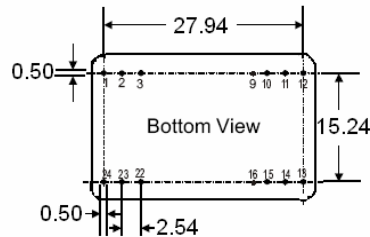
Model Number	Input Voltage Range(V)	Output Vdc	Output Current (mA)	Eff. @FL (%)
S6-123R3S4	9-18	3.3	1200	72
S6-1205S4		5	800	78
S6-1209S4		9	444	78
S6-1212S4		12	333	80
S6-1215S4		15	266	80
S6-1224S4		24	166	80
S6-123R3D4	9-18	±3.3	±600	73
S6-1205D4		±5	±400	78
S6-1209D4		±9	±220	80
S6-1212D4		±12	±166	80
S6-1215D4		±15	±133	80
S6-1224D4		±24	±83	79
S6-243R3S4	18-36	3.3	1200	75
S6-2405S4		5	800	80
S6-2409S4		9	444	80
S6-2412S4		12	333	83
S6-2415S4		15	266	80
S6-2424S4		24	166	85
S6-243R3D4	18-36	±3.3	±600	73
S6-2405D4		±5	±400	79
S6-2409D4		±9	±220	80
S6-2412D4		±12	±166	82
S6-2415D4		±15	±133	80
S6-2424D4		±24	±83	78
S6-483R3S4	36-72	3.3	1200	75
S6-4805S4		5	800	80
S6-4809S4		9	444	82
S6-4812S4		12	333	80
S6-4815S4		15	266	81
S6-4824S4		24	166	82
S6-483R3D4	36-72	±3.3	±600	72
S6-4805D4		±5	±400	78
S6-4809D4		±9	±220	78
S6-4812D4		±12	±166	80
S6-4815D4		±15	±133	80
S6-4824D4		±24	±83	80

<b>Input specifications:</b>	
Input Reflected Ripple Current Filter:	35mA pk-pk, typ Pi Type
<b>Output specifications:</b>	
Voltage accuracy	±1%
Ripple & noise (at 20MHz BW)	60mV pk-pk
Line regulation	±0.5%
Load regulation	±0.5%
Temperature coefficient	out (±)3.3V models ±20% ±0.02%/°C
<b>General Specifications:</b>	
Switching Frequency	266 kHz, typ
I/O isolation voltage (3 sec)	1500~3500Vdc
Metal Case	1000Vdc
Safety standard	IEC 60950-1:2001
<b>Environmental specifications:</b>	
Operating Temperature	-40°C ~ +85°C
Case temperature	100°C Max.
Storage Temperature	-40°C ~ +125°C
Cooling	Nature Convection
Humidity	95% rel H

## MECHANICAL DIMENSIONS 24 Pin DIL Package



PIN #	Single	Dual	Single-H	Dual-H
1	+Vin	+Vin	N.P.	N.P.
2	N.C.	-Vout	-Vin	-Vin
3	N.C.	Common	-Vin	-Vin
9	N.P.	N.P.	N.C.	Common
10	-Vout	Common	N.P.	N.P.
11	+Vout	+Vout	N.C.	-Vout
12	-Vin	-Vin	N.P.	N.P.
13	-Vin	-Vin	N.P.	N.P.
14	+Vout	+Vout	+Vout	+Vout
15	-Vout	Common	N.P.	N.P.
16	N.P.	N.P.	-Vout	Common
22	N.C.	Common	+Vin	+Vin
23	N.C.	-Vout	+Vin	+Vin
24	+Vin	+Vin	N.P.	N.P.



# DC/DC Converters – S6-S/D5 series

5 WATT

Single / Dual Output

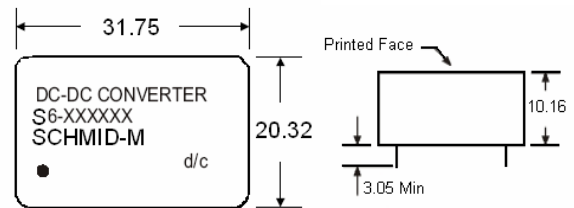
## FEATURES

- Wide 2:1 Input Range
- Full SMD Technology
- 1500 Vdc Isolation, Up to 3500 Vdc
- Operating Temperature Range - 40°C ~ 85°C
- Continuous Short Circuit Protection
- Efficiency up to 83 %
- Metal Case Standard, optional Plastic Case

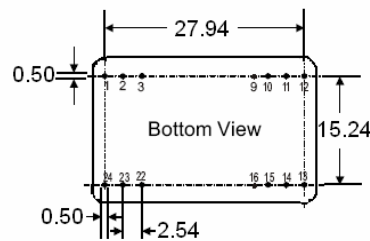
Model Number	Input Voltage Range(V)	Output Vdc	Output Current (mA)	Eff. @FL (%)
S6-123R3S5	9-18	3.3	1300	73
S6-1205S5		5	1000	77
S6-1209S5		9	555	78
S6-1212S5		12	417	81
S6-1215S5		15	333	80
S6-1224S5		24	208	80
S6-123R3D5	9-18	±3.3	±750	73
S6-1205D5		±5	±500	77
S6-1209D5		±9	±278	80
S6-1212D5		±12	±208	80
S6-1215D5		±15	±167	79
S6-1224D5		±24	±104	80
S6-243R3S5	18-36	3.3	1300	75
S6-2405S5		5	1000	80
S6-2409S5		9	555	82
S6-2412S5		12	417	80
S6-2415S5		15	333	82
S6-2424S5		24	208	82
S6-243R3D5	18-36	±3.3	±750	75
S6-2405D5		±5	±500	78
S6-2409D5		±9	±278	83
S6-2412D5		±12	±208	80
S6-2415D5		±15	±167	80
S6-2424D5		±24	±104	80
S6-483R3S5	36-72	3.3	1300	75
S6-4805S5		5	1000	80
S6-4809S5		9	555	82
S6-4812S5		12	417	80
S6-4815S5		15	333	83
S6-4824S5		24	208	83
S6-483R3D5	36-72	±3.3	±750	73
S6-4805D5		±5	±500	79
S6-4809D5		±9	±278	79
S6-4812D5		±12	±208	80
S6-4815D5		±15	±167	80
S6-4824D5		±24	±104	80

<b>Input specifications:</b>	
Input Reflected Ripple Current Filter:	35mA pk-pk, typ Pi Type
<b>Output specifications:</b>	
Voltage accuracy	±1%
Ripple & noise (at 20MHz BW)	60mV pk-pk
Line regulation	±0.5%
Load regulation	±0.5%
Temperature coefficient	out (±3.3V models) ±20% ±0.02%/°C
<b>General Specifications:</b>	
Switching Frequency	266 kHz, typ
I/O isolation voltage (3 sec)	1500~3500Vdc
	Metal Case 1000Vdc
Safety standard	IEC 60950-1:2001
<b>Environmental specifications:</b>	
Operating Temperature	-40°C ~ +85°C
Case temperature	100°C Max.
Storage Temperature	-40°C ~ +125°C
Cooling	Nature Convection
Humidity	95% rel H

## MECHANICAL DIMENSIONS 24 Pin DIL Package



PIN #	Single	Dual	Single-H	Dual-H
1	+Vin	+Vin	N.P.	N.P.
2	N.C.	-Vout	-Vin	-Vin
3	N.C.	Common	-Vin	-Vin
9	N.P.	N.P.	N.C.	Common
10	-Vout	Common	N.P.	N.P.
11	+Vout	+Vout	N.C.	-Vout
12	-Vin	-Vin	N.P.	N.P.
13	-Vin	-Vin	N.P.	N.P.
14	+Vout	+Vout	+Vout	+Vout
15	-Vout	Common	N.P.	N.P.
16	N.P.	N.P.	-Vout	Common
22	N.C.	Common	+Vin	+Vin
23	N.C.	-Vout	+Vin	+Vin
24	+Vin	+Vin	N.P.	N.P.



# DC/DC Converters – S6-S/D6 series

6 WATT

Single / Dual Output

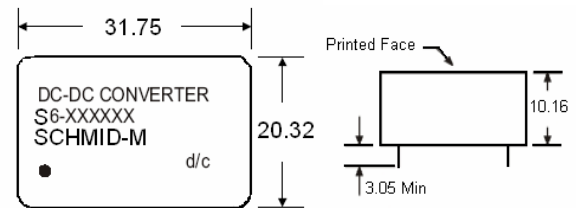
## FEATURES

- Wide 2:1 Input Range
- Full SMD Technology
- 1500 Vdc Isolation, Up to 3500 Vdc
- Operating Temperature Range - 40°C ~ 85°C
- Continuous Short Circuit Protection
- Efficiency up to 83 %
- Metal Case Standard, optional Plastic Case

Model Number	Input Voltage Range(V)	Output Vdc	Output Current (mA)	Eff. @FL (%)
S6-123R3S6	9-18	3.3	1400	73
S6-1205S6		5	1200	77
S6-1209S6		9	666	78
S6-1212S6		12	500	81
S6-1215S6		15	400	80
S6-1224S6		24	250	80
S6-123R3D6	9-18	±3.3	±909	73
S6-1205D6		±5	±600	77
S6-1209D6		±9	±333	80
S6-1212D6		±12	±250	80
S6-1215D6		±15	±200	79
S6-1224D6		±24	±125	80
S6-243R3S6	18-36	3.3	1400	75
S6-2405S6		5	1200	80
S6-2409S6		9	666	82
S6-2412S6		12	500	80
S6-2415S6		15	400	82
S6-2424S6		24	250	82
S6-243R3D6	18-36	±3.3	±909	75
S6-2405D6		±5	±600	78
S6-2409D6		±9	±333	83
S6-2412D6		±12	±250	80
S6-2415D6		±15	±200	80
S6-2424D6		±24	±125	80
S6-483R3S6	36-72	3.3	1400	75
S6-4805S6		5	1200	80
S6-4809S6		9	666	82
S6-4812S6		12	500	80
S6-4815S6		15	400	83
S6-4824S6		24	250	83
S6-483R3D6	36-72	±3.3	±909	73
S6-4805D6		±5	±600	79
S6-4809D6		±9	±333	79
S6-4812D6		±12	±250	80
S6-4815D6		±15	±200	80
S6-4824D6		±24	±125	80

<b>Input specifications:</b>	
Input Reflected Ripple Current Filter:	35mA pk-pk, typ Pi Type
<b>Output specifications:</b>	
Voltage accuracy	±1%
Ripple & noise (at 20MHz BW)	60mV pk-pk
Line regulation	±0.5%
Load regulation	±0.5%
Temperature coefficient	out (±)3.3V models ±20% ±0.02%/°C
<b>General Specifications:</b>	
Switching Frequency	266 kHz, typ
I/O isolation voltage (3 sec)	1500~3500Vdc
	Metal Case 1000Vdc
Safety standard	IEC 60950-1:2001
<b>Environmental specifications:</b>	
Operating Temperature	-40°C ~ +85°C
Case temperature	100°C Max.
Storage Temperature	-40°C ~ +125°C
Cooling	Nature Convection
Humidity	95% rel H

## MECHANICAL DIMENSIONS 24 Pin DIL Package



PIN #	Single	Dual	Single-H	Dual-H
1	+Vin	+Vin	N.P.	N.P.
2	N.C.	-Vout	-Vin	-Vin
3	N.C.	Common	-Vin	-Vin
9	N.P.	N.P.	N.C.	Common
10	-Vout	Common	N.P.	N.P.
11	+Vout	+Vout	N.C.	-Vout
12	-Vin	-Vin	N.P.	N.P.
13	-Vin	-Vin	N.P.	N.P.
14	+Vout	+Vout	+Vout	+Vout
15	-Vout	Common	N.P.	N.P.
16	N.P.	N.P.	-Vout	Common
22	N.C.	Common	+Vin	+Vin
23	N.C.	-Vout	+Vin	+Vin
24	+Vin	+Vin	N.P.	N.P.

