

**DSM-1 SERIES, 1WATT, 1KVDC, ISOLATED, UNREGULATED**

**FEATURES:**

- ✓ 1000Vdc isolation voltage
- ✓ Single and dual output models
- ✓ High efficiency, and low ripple and noise
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)		Efficiency Typ.
			Min.	Max.	
DSM1-0310	3.3(3.0~3.6)	3.3	30	300	73%
DSM1-0311		5	20	200	74%
DSM1-0312		9	11	111	75%
DSM1-0313		12	8.3	83	78%
DSM1-0314		15	6.7	67	78%
DSM1-0321		±5	10	100	71%
DSM1-0323		±12	4.2	42	78%
DSM1-0324		±15	3.3	33	79%
DSM1-0510	5(4.5~5.5)	3.3	30	300	73%
DSM1-0511		5	20	200	77%
DSM1-0512		9	11	111	76%
DSM1-0513		12	8.3	83	79%
DSM1-0514		15	6.7	67	78%
DSM1-0521		±5	10	100	72%
DSM1-0522		±9	5.5	55	78%
DSM1-0523		±12	4.2	42	78%
DSM1-0524	±15	3.3	33	79%	
DSM1-1210	12(10.8~13.2)	3.3	30	300	71%
DSM1-1211		5	20	200	69%
DSM1-1212		9	11	111	73%
DSM1-1213		12	8.3	83	73%
DSM1-1214		15	6.7	67	74%
DSM1-1221		±5	10	100	72%
DSM1-1222		±9	5.5	55	73%
DSM1-1223		±12	4.2	42	73%
DSM1-1224	±15	3.3	33	78%	
DSM1-1510	15(13.5~16.5)	3.3	30	300	60%
DSM1-1511		5	20	200	70%
DSM1-1512		9	11	111	71%

**DSM-1 SERIES, 1WATT, 1KVDC, ISOLATED, UNREGULATED**

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)		Efficiency Typ.
			Min.	Max.	
DSM1-1513	15(13.5~16.5)	12	8.3	83	72%
DSM1-1514		15	6.7	67	72%
DSM1-1521		±5	10	100	76%
DSM1-1524		±15	3.3	33	79%

Notes: Other input and output models may available on request.

**ELECTRICAL**

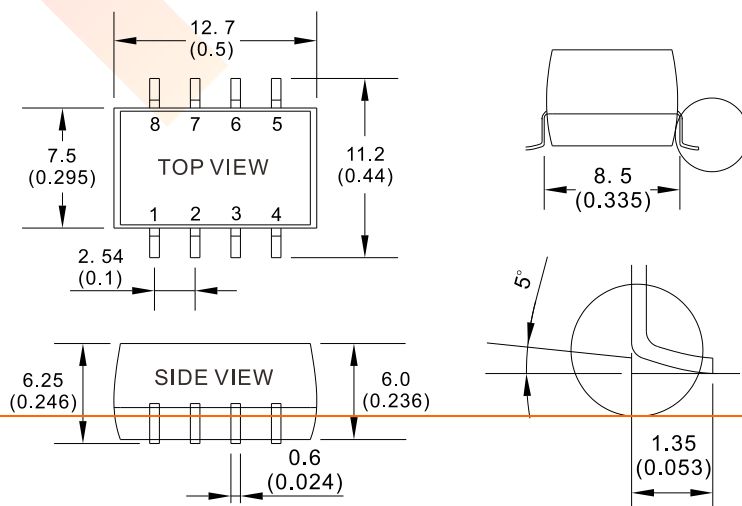
Line regulation	---	1.2% max.
Load regulation	10% ~ 100% full load	10%max.
Isolation voltage	Leakage current < 1mA/1min.	1000Vdc min.
Isolation resistance	Test at 500VDC	1000mΩ min.
Switching frequency	---	100KHz typ.
Ripple and noise	Bend width 20MHz	75mVp-p max.
Temperature coefficient	Rated load	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	1S
MTBF	---	3500KHrs
Weight	---	1.4g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

**MECHANICAL**

**Single output**

**CONNECTION**



PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	NC	NC
4	0V	0V
5	+Vo	-Vo
6	NC	NC
7	NC	+Vo
8	NC	NC



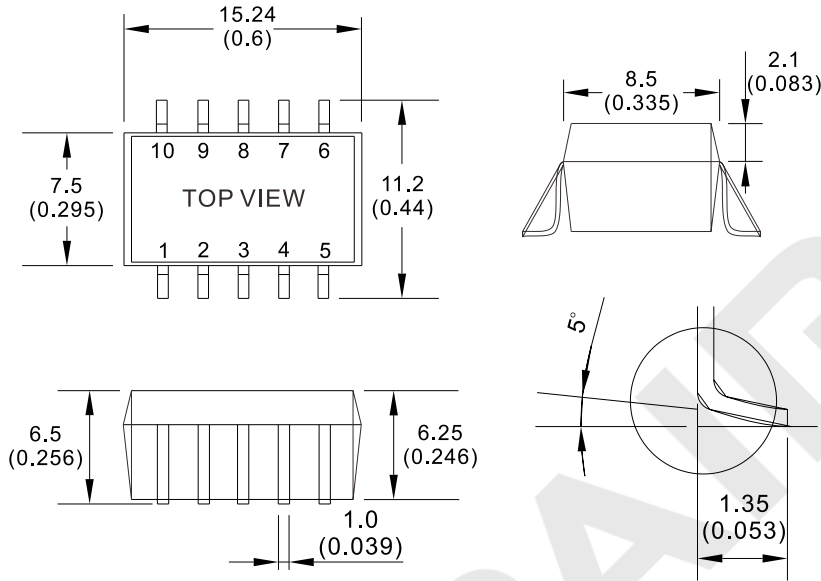
**DSM-1 SERIES, 1WATT, 1KVDC, ISOLATED, UNREGULATED**

Note:

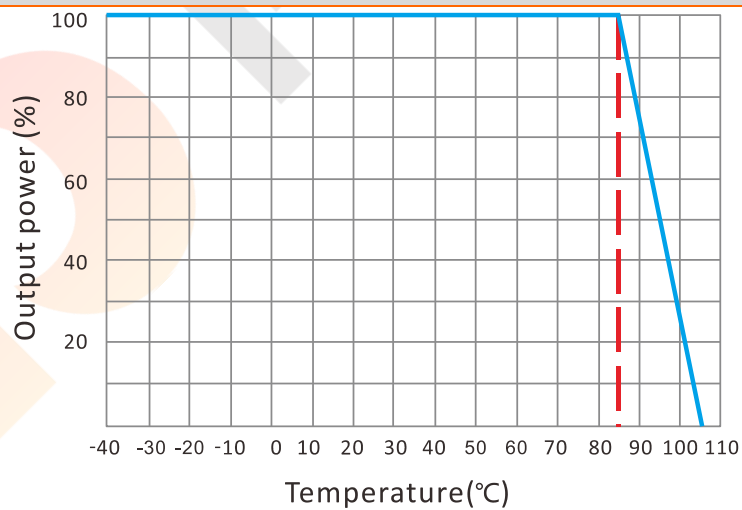
\* Unit is mm(inch).

**MECHANICAL**

**Dual output**



**ELECTRICAL CURVE**



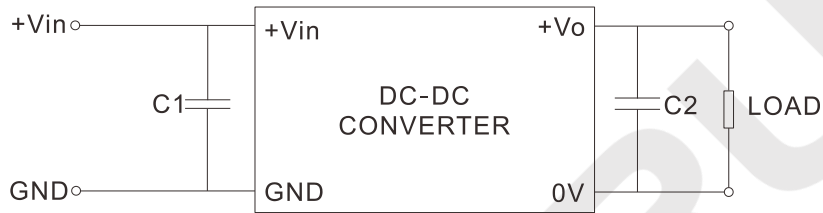


**DSM-1 SERIES, 1WATT, 1KVDC, ISOLATED, UNREGULATED**

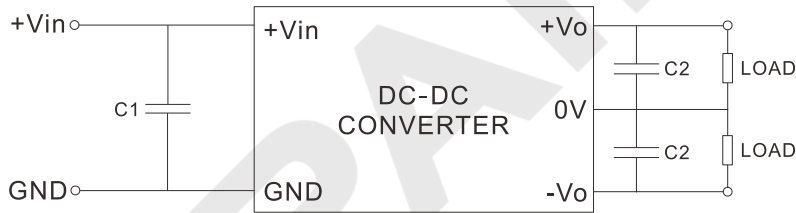
**NOTE**

**RECOMMENDED TEST AND APPLICATION CIRCUIT**

**SINGLE OUTPUT**



**DUAL OUTPUT**



**CAPACITOR SELECTION**

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
3.3VDC	4.7μF	3.3VDC	10.0μF	±5VDC	10.0μF
5VDC	4.7μF	5VDC	10.0μF	±9VDC	4.7μF
12VDC	2.2μF	9VDC	4.7μF	±12VDC	2.2μF
15VDC	2.2μF	12VDC	2.2μF	±15VDC	1.0μF
--	--	15VDC	2.2μF	--	--

**DTM-1 SERIES, 1WATT, 1.5KVDC, ISOLATED, UNREGULATED**
**FEATURES:**

- ✓ 1500Vdc isolation voltage
- ✓ Single and dual output models
- ✓ High efficiency, and low ripple and noise
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)		Efficiency Typ.
			Min.	Max.	
DTM1-0310	3.3(3.0~3.6)	3.3	30	300	60%
DTM1-0311		5	20	200	68%
DTM1-0312		9	11.1	111	76%
DTM1-0313		12	8.3	83	77%
DTM1-0314		15	6.7	67	78%
DTM1-0321		±5	10	100	70%
DTM1-0322		±9	5.6	56	73%
DTM1-0323		±12	4.2	42	78%
DTM1-0324		±15	3.3	33	79%
DTM1-0510		5(4.5~5.5)	3.3	30	300
DTM1-0511	5		20	200	70%
DTM1-0512	9		11.1	111	76%
DTM1-0513	12		8.3	83	78%
DTM1-0514	15		6.7	67	78%
DTM1-0521	±5		10	100	70%
DTM1-0522	±9		5.6	56	73%
DTM1-0523	±12		4.2	42	77%
DTM1-0524	±15		3.3	33	78%
DTM1-1210	12(10.8~13.2)		3.3	30	300
DTM1-1211		5	20	200	71%
DTM1-1212		9	11.1	111	73%
DTM1-1213		12	8.3	83	80%
DTM1-1214		15	6.7	67	81%
DTM1-1221		±5	10	100	70%
DTM1-1222		±9	5.6	56	73%
DTM1-1223		±12	4.2	42	77%
DTM1-1224		±15	3.3	33	78%
DTM1-1511		15(13.5~16.5)	5	20	200
DTM1-1514	15		6.7	67	80%

**DTM-1 SERIES, 1WATT, 1.5KVDC, ISOLATED, UNREGULATED**

Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)		Efficiency Typ.
			Min.	Max.	
DTM1-2411	24(21.6~26.4)	5	20	200	70%

Notes: Other input and output models may available on request.

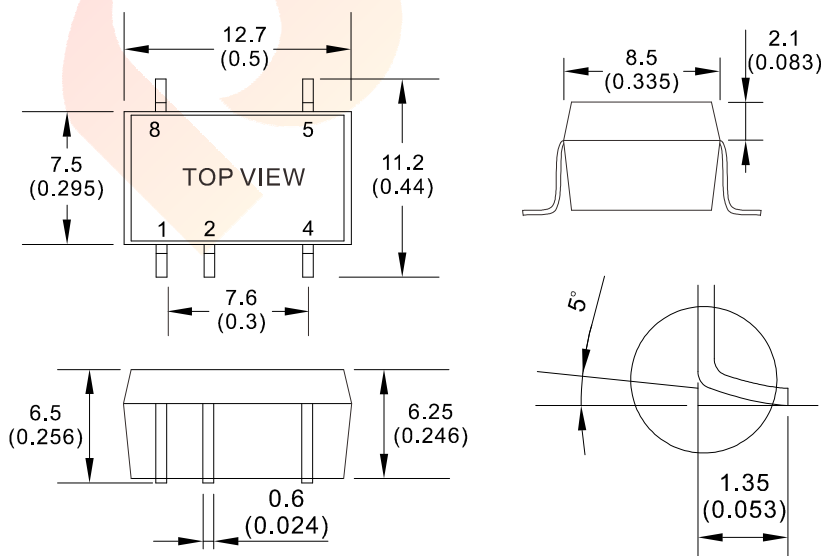
**ELECTRICAL**

Line regulation	---	1.5% max.
Load regulation	10% ~ 100% full load	15%max.
Isolation voltage	Leakage current < 1mA/1min.	1500Vdc min.
Isolation resistance	Test at 500VDC	1000mΩ min.
Switching frequency	---	100KHz typ.
Ripple and noise	Bend width 20MHz	150mVp-p max.
Temperature coefficient	Rated load	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	1S
MTBF	---	3500KHrs
Weight	---	1.7g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

**MECHANICAL**

**Single output**



**CONNECTION**

PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
4	0V	0V
5	+Vo	-Vo
7	No Pin	+Vo
8	NC	No Pin
10	No Pin	NC

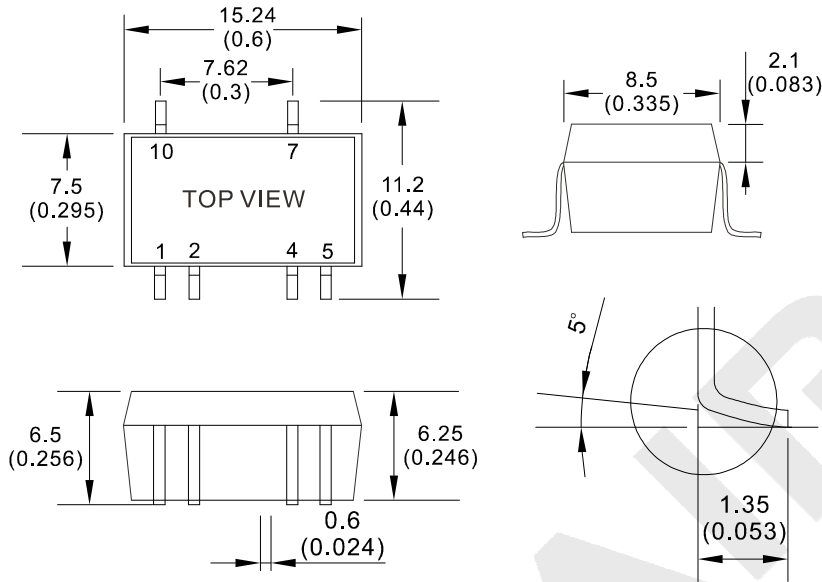
Note:

\* Unit is mm(inch).

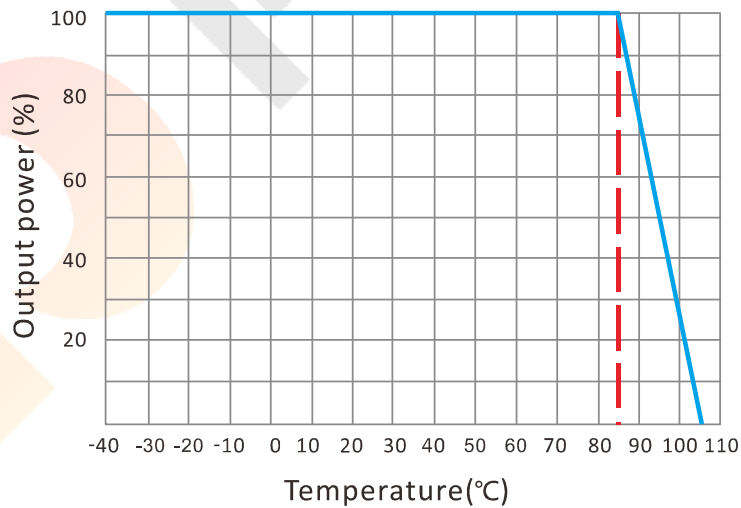
DTM-1 SERIES, 1WATT, 1.5KVDC, ISOLATED, UNREGULATED

MECHANICAL

Dual output



ELECTRICAL CURVE



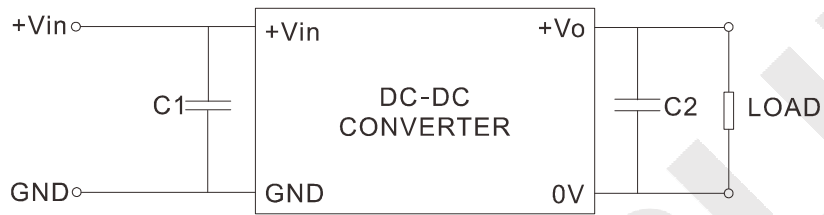


**DTM-1 SERIES, 1WATT, 1.5KVDC, ISOLATED, UNREGULATED**

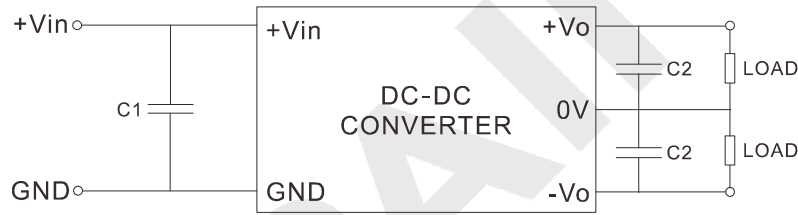
**NOTE**

**RECOMMENDED TEST AND APPLICATION CIRCUIT**

**SINGLE OUTPUT**



**DUAL OUTPUT**



**CAPACITOR SELECTION**

INPUT VOLTAGE	C1	SINGLE OUTPUT	C2	DUAL OUTPUT	C2
3.3VDC	4.7 $\mu$ F	3.3VDC	10.0 $\mu$ F	$\pm$ 5VDC	10.0 $\mu$ F
5VDC	4.7 $\mu$ F	5VDC	10.0 $\mu$ F	$\pm$ 9VDC	4.7 $\mu$ F
12VDC	2.2 $\mu$ F	9VDC	4.7 $\mu$ F	$\pm$ 12VDC	2.2 $\mu$ F
--	--	12VDC	2.2 $\mu$ F	$\pm$ 15VDC	1.0 $\mu$ F
--	--	15VDC	2.2 $\mu$ F	--	--



**DTM-1F SERIES, 1WATT, 3KVDC, ISOLATED, UNREGULATED**

**FEATURES:**

- ✓ 3000Vdc isolation voltage
- ✓ Single and dual output models
- ✓ High efficiency, and low ripple and noise
- ✓ Operating temperature range -40°C to +85°C
- ✓ 3 year warranty



Model	Input voltage (Vdc)	Output voltage (Vdc)	Output current (mA)		Efficiency Typ.
			Min.	Max.	
DTM1-0310F	3.3(3.0~3.6)	3.3	30	300	60%
DTM1-0311F		5	20	200	68%
DTM1-0312F		9	11.1	111	76%
DTM1-0313F		12	8.3	83	77%
DTM1-0314F		15	6.7	67	78%
DTM1-0321F		±5	10	100	70%
DTM1-0322F		±9	5.6	56	73%
DTM1-0323F		±12	4.2	42	78%
DTM1-0324F		±15	3.3	33	79%
DTM1-0510F		5(4.5~5.5)	3.3	30	300
DTM1-0511F	5		20	200	70%
DTM1-0512F	9		11.1	111	76%
DTM1-0513F	12		8.3	83	78%
DTM1-0514F	15		6.7	67	78%
DTM1-0521F	±5		10	100	70%
DTM1-0522F	±9		5.6	56	73%
DTM1-0523F	±12		4.2	42	77%
DTM1-0524F	±15		3.3	33	78%
DTM1-1210F	12(10.8~13.2)		3.3	30	300
DTM1-1211F		5	20	200	71%
DTM1-1212F		9	11.1	111	73%
DTM1-1213F		12	8.3	83	80%
DTM1-1214F		15	6.7	67	81%
DTM1-1221F		±5	10	100	70%
DTM1-1222F		±9	5.6	56	73%
DTM1-1223F		±12	4.2	42	77%
DTM1-1224F		±15	3.3	33	78%

Notes: Other input and output models may available on request.

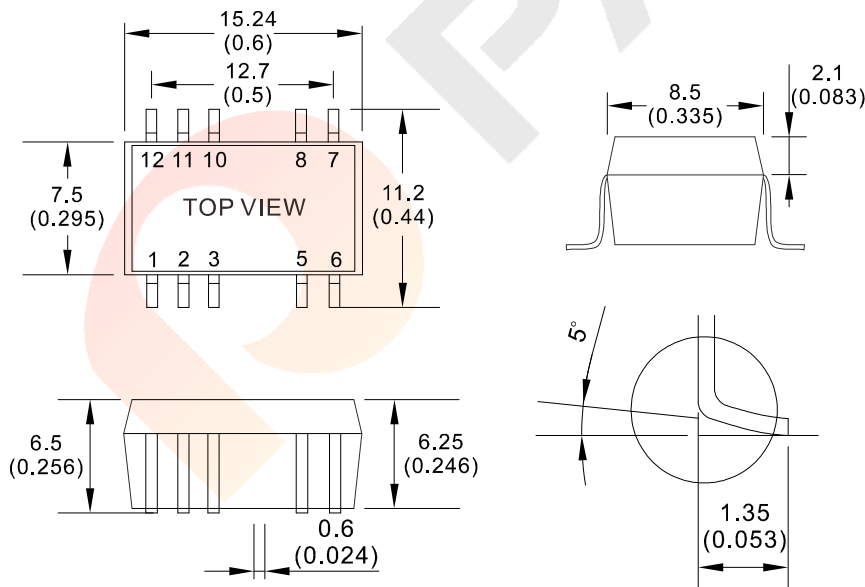
DTM-1F SERIES, 1WATT, 3KVDC, ISOLATED, UNREGULATED

**ELECTRICAL**

Line regulation	---	1.5% max.
Load regulation	10% ~ 100% full load	15%max.
Isolation voltage	Leakage current < 1mA/1min.	3000Vdc min.
Isolation resistance	Test at 500VDC	1000mΩ min.
Switching frequency	---	100KHz typ.
Ripple and noise	Bend width 20MHz	100mVp-p max.
Temperature coefficient	Rated load	±0.03%/°C max.
Operating temperature range	---	-40°C to +85°C
Storage temperature range	---	-55°C to +125°C
Short circuit protection	---	1S
MTBF	---	3500KHrs
Weight	---	1.7g

Notes: All the parameters are measured at 25°C ambient temperature, humidity < 75%, nominal input voltage, full load and after warm-up, unless otherwise specified.

**MECHANICAL**



**CONNECTION**

PIN #	SINGLE	DUAL
1	GND	GND
2	+Vin	+Vin
3	NC	NC
5	0V	0V
	NC	-Vo
7	NC	NC
8	+Vo	+Vo
10	NC	NC
11	NC	NC
12	NC	NC

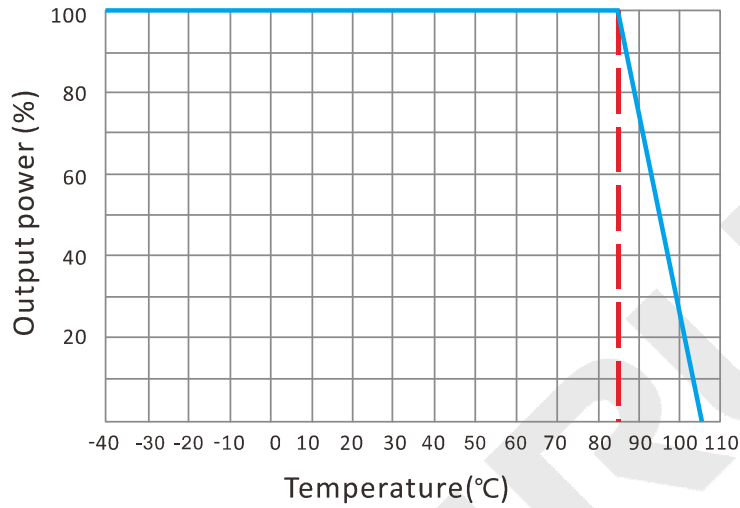
Note:

\* Unit is mm(inch).



**DTM-1F SERIES, 1WATT, 3KVDC, ISOLATED, UNREGULATED**

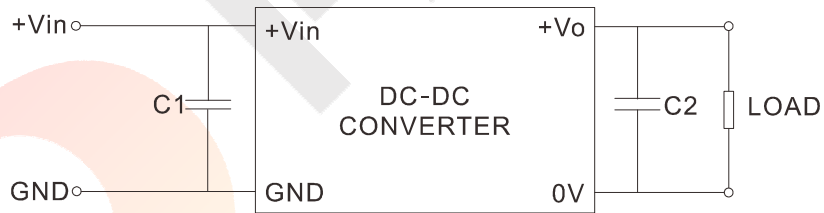
**ELECTRICAL CURVE**



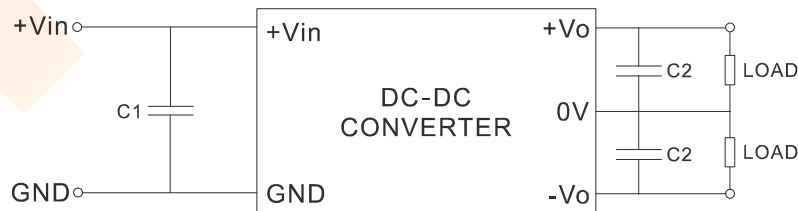
**NOTE**

**RECOMMENDED TEST AND APPLICATION CIRCUIT**

**SINGLE OUTPUT**



**DUAL OUTPUT**





**DTM-1F SERIES, 1WATT, 3KVDC, ISOLATED, UNREGULATED**

**NOTE**

**CAPACITOR SELECTION**

<b>INPUT VOLTAGE</b>	<b>C1</b>	<b>SINGLE OUTPUT</b>	<b>C2</b>	<b>DUAL OUTPUT</b>	<b>C2</b>
3.3VDC	4.7μF	3.3VDC	10.0μF	±5VDC	10.0μF
5VDC	4.7μF	5VDC	10.0μF	±9VDC	4.7μF
12VDC	2.2μF	9VDC	4.7μF	±12VDC	2.2μF
--	--	12VDC	2.2μF	±15VDC	1.0μF
--	--	15VDC	2.2μF	--	--

