

## Series AM2D-Z

### 2 Watt | DC-DC Converter



#### FEATURES:

- RoHS Compliant
- Low Ripple and Noise
- High Efficiency up to 82%
- 7 Pin SIP Package
- Operating Temperature -40°C to +85°C
- Pin Compatible with Multiple Manufacturers
- Isolation of 1000, 3000, 4000, 5200 & 6000 VDC



#### Models

##### Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current Max (mA)	Input Current Full Load   No Load (mA)		Isolation (VDC)	Max Capacitive Load (μF)	Efficiency (%)
AM2D-0503SZ	4.5-5.5	3.3	400	513	16	1000	470	72
AM2D-0505SZ	4.5-5.5	5	400	488	20	1000	470	78
AM2D-0507SZ	4.5-5.5	7.2	278	494	22	1000	470	80
AM2D-0509SZ	4.5-5.5	9	222	476	35	1000	470	80
AM2D-0512SZ	4.5-5.5	12	167	470	30	1000	470	82
AM2D-0515SZ	4.5-5.5	15	134	465	25	1000	470	82
AM2D-0518SZ	4.5-5.5	18	111	494	25	1000	470	82
AM2D-0524SZ	4.5-5.5	24	83	471	22	1000	470	82
AM2D-1203SZ	10.8-13.2	3.3	400	242	20	1000	470	65
AM2D-1205SZ	10.8-13.2	5	400	203	20	1000	470	77
AM2D-1207SZ	10.8-13.2	7.2	278	201	15	1000	470	80
AM2D-1209SZ	10.8-13.2	9	222	201	17	1000	470	80
AM2D-1212SZ	10.8-13.2	12	167	196	15	1000	470	82
AM2D-1215SZ	10.8-13.2	15	134	196	20	1000	470	82
AM2D-1218SZ	10.8-13.2	18	111	198	18	1000	470	80
AM2D-1224SZ	10.8-13.2	24	83	201	15	1000	470	80
AM2D-2403SZ	21.6-26.4	3.3	400	107	5	1000	470	72
AM2D-2405SZ	21.6-26.4	5	400	104	10	1000	470	79
AM2D-2407SZ	21.6-26.4	7.2	278	104	10	1000	470	80
AM2D-2409SZ	21.6-26.4	9	222	100	10	1000	470	80
AM2D-2412SZ	21.6-26.4	12	167	98	8	1000	470	80
AM2D-2415SZ	21.6-26.4	15	134	99	8	1000	470	82
AM2D-2418SZ	21.6-26.4	18	111	102	10	1000	470	82
AM2D-2424SZ	21.6-26.4	24	83	100	13	1000	470	82
AM2D-4803SZ	43.2-52.8	3.3	400	53	5	1000	470	72
AM2D-4805SZ	43.2-52.8	5	400	53	5	1000	470	79
AM2D-4807SZ	43.2-52.8	7.2	278	52	10	1000	470	80
AM2D-4809SZ	43.2-52.8	9	222	52	10	1000	470	80
AM2D-4812SZ	43.2-52.8	12	167	50	10	1000	470	80
AM2D-4815SZ	43.2-52.8	15	134	52	8	1000	470	82
AM2D-4818SZ	43.2-52.8	18	111	51	8	1000	470	82
AM2D-4824SZ	43.2-52.8	24	83	51	10	1000	470	82
AM2D-0503SH30Z	4.5-5.5	3.3	400	513	16	3000	470	72
AM2D-0505SH30Z	4.5-5.5	5	400	488	20	3000	470	78
AM2D-0507SH30Z	4.5-5.5	7.2	278	494	22	3000	470	80
AM2D-0509SH30Z	4.5-5.5	9	222	476	35	3000	470	80
AM2D-0512SH30Z	4.5-5.5	12	167	470	30	3000	470	82
AM2D-0515SH30Z	4.5-5.5	15	134	465	25	3000	470	82
AM2D-0518SH30Z	4.5-5.5	18	111	494	25	3000	470	82
AM2D-0524SH30Z	4.5-5.5	24	83	471	22	3000	470	82
AM2D-1203SH30Z	10.8-13.2	3.3	400	242	20	3000	470	65
AM2D-1205SH30Z	10.8-13.2	5	400	203	20	3000	470	77
AM2D-1207SH30Z	10.8-13.2	7.2	278	201	15	3000	470	80
AM2D-1209SH30Z	10.8-13.2	9	222	201	17	3000	470	80
AM2D-1212SH30Z	10.8-13.2	12	167	196	15	3000	470	82
AM2D-1215SH30Z	10.8-13.2	15	134	196	20	3000	470	82

**Models**

**Single output (continued)**

Model	Input Voltage (V)	Output Voltage (V)	Output Current Max (mA)	Input Current Full Load   No Load (mA)		Isolation (VDC)	Max Capacitive Load (μF)	Efficiency (%)
AM2D-1218SH30Z	10.8-13.2	18	111	198	18	3000	470	80
AM2D-1224SH30Z	10.8-13.2	24	83	201	15	3000	470	80
AM2D-2403SH30Z	21.6-26.4	3.3	400	107	5	3000	470	72
AM2D-2405SH30Z	21.6-26.4	5	400	104	10	3000	470	79
AM2D-2407SH30Z	21.6-26.4	7.2	278	104	10	3000	470	80
AM2D-2409SH30Z	21.6-26.4	9	222	100	10	3000	470	80
AM2D-2412SH30Z	21.6-26.4	12	167	98	8	3000	470	80
AM2D-2415SH30Z	21.6-26.4	15	134	99	8	3000	470	82
AM2D-2418SH30Z	21.6-26.4	18	111	102	10	3000	470	82
AM2D-2424SH30Z	21.6-26.4	24	83	100	13	3000	470	82
AM2D-4803SH30Z	43.2-52.8	3.3	400	53	5	3000	470	72
AM2D-4805SH30Z	43.2-52.8	5	400	53	5	3000	470	79
AM2D-4807SH30Z	43.2-52.8	7.2	278	52	10	3000	470	80
AM2D-4809SH30Z	43.2-52.8	9	222	52	10	3000	470	80
AM2D-4812SH30Z	43.2-52.8	12	167	50	10	3000	470	80
AM2D-4815SH30Z	43.2-52.8	15	134	52	8	3000	470	82
AM2D-4818SH30Z	43.2-52.8	18	111	51	8	3000	470	82
AM2D-4824SH30Z	43.2-52.8	24	83	51	10	3000	470	82
							470	
AM2D-0503SH40Z	4.5-5.5	3.3	400	513	16	4000	470	72
AM2D-0505SH40Z	4.5-5.5	5	400	488	20	4000	470	78
AM2D-0507SH40Z	4.5-5.5	7.2	278	494	22	4000	470	80
AM2D-0509SH40Z	4.5-5.5	9	222	476	35	4000	470	80
AM2D-0512SH40Z	4.5-5.5	12	167	470	30	4000	470	82
AM2D-0515SH40Z	4.5-5.5	15	134	465	25	4000	470	82
AM2D-0518SH40Z	4.5-5.5	18	111	494	25	4000	470	82
AM2D-0524SH40Z	4.5-5.5	24	83	471	22	4000	470	82
AM2D-1203SH40Z	10.8-13.2	3.3	400	242	20	4000	470	65
AM2D-1205SH40Z	10.8-13.2	5	400	203	20	4000	470	77
AM2D-1207SH40Z	10.8-13.2	7.2	278	201	15	4000	470	80
AM2D-1209SH40Z	10.8-13.2	9	222	201	17	4000	470	80
AM2D-1212SH40Z	10.8-13.2	12	167	196	15	4000	470	82
AM2D-1215SH40Z	10.8-13.2	15	134	196	20	4000	470	82
AM2D-1218SH40Z	10.8-13.2	18	111	198	18	4000	470	80
AM2D-1224SH40Z	10.8-13.2	24	83	201	15	4000	470	80
AM2D-2403SH40Z	21.6-26.4	3.3	400	107	5	4000	470	72
AM2D-2405SH40Z	21.6-26.4	5	400	104	10	4000	470	79
AM2D-2407SH40Z	21.6-26.4	7.2	278	104	10	4000	470	80
AM2D-2409SH40Z	21.6-26.4	9	222	100	10	4000	470	80
AM2D-2412SH40Z	21.6-26.4	12	167	98	8	4000	470	80
AM2D-2415SH40Z	21.6-26.4	15	134	99	8	4000	470	82
AM2D-2418SH40Z	21.6-26.4	18	111	102	10	4000	470	82
AM2D-2424SH40Z	21.6-26.4	24	83	100	13	4000	470	80
AM2D-4803SH40Z	43.2-52.8	3.3	400	53	5	4000	470	72
AM2D-4805SH40Z	43.2-52.8	5	400	53	5	4000	470	79
AM2D-4807SH40Z	43.2-52.8	7.2	278	52	10	4000	470	80
AM2D-4809SH40Z	43.2-52.8	9	222	52	10	4000	470	80
AM2D-4812SH40Z	43.2-52.8	12	167	50	10	4000	470	80
AM2D-4815SH40Z	43.2-52.8	15	134	52	8	4000	470	82
AM2D-4818SH40Z	43.2-52.8	18	111	51	8	4000	470	82
AM2D-4824SH40Z	43.2-52.8	24	83	51	10	4000	470	82
							470	
AM2D-0503SH52Z	4.5-5.5	3.3	400	513	16	5200	470	72
AM2D-0505SH52Z	4.5-5.5	5	400	488	20	5200	470	78
AM2D-0507SH52Z	4.5-5.5	7.2	278	494	22	5200	470	80

**Models**

**Single output (continued)**

Model	Input Voltage (V)	Output Voltage (V)	Output Current Max (mA)	Input Current Full Load   No Load (mA)		Isolation (VDC)	Max Capacitive Load (μF)	Efficiency (%)
AM2D-0509SH52Z	4.5-5.5	9	222	476	35	5200	470	80
AM2D-0512SH52Z	4.5-5.5	12	167	470	30	5200	470	82
AM2D-0515SH52Z	4.5-5.5	15	134	465	25	5200	470	82
AM2D-0518SH52Z	4.5-5.5	18	111	494	25	5200	470	82
AM2D-0524SH52Z	4.5-5.5	24	83	471	22	5200	470	82
AM2D-1203SH52Z	10.8-13.2	3.3	400	242	20	5200	470	65
AM2D-1205SH52Z	10.8-13.2	5	400	203	20	5200	470	77
AM2D-1207SH52Z	10.8-13.2	7.2	278	201	15	5200	470	80
AM2D-1209SH52Z	10.8-13.2	9	222	201	17	5200	470	80
AM2D-1212SH52Z	10.8-13.2	12	167	196	15	5200	470	82
AM2D-1215SH52Z	10.8-13.2	15	134	196	20	5200	470	82
AM2D-1218SH52Z	10.8-13.2	18	111	198	18	5200	470	80
AM2D-1224SH52Z	10.8-13.2	24	83	201	15	5200	470	80
AM2D-2403SH52Z	21.6-26.4	3.3	400	107	5	5200	470	72
AM2D-2405SH52Z	21.6-26.4	5	400	104	10	5200	470	79
AM2D-2407SH52Z	21.6-26.4	7.2	278	104	10	5200	470	80
AM2D-2409SH52Z	21.6-26.4	9	222	100	10	5200	470	80
AM2D-2412SH52Z	21.6-26.4	12	167	98	8	5200	470	80
AM2D-2415SH52Z	21.6-26.4	15	134	99	8	5200	470	82
AM2D-2418SH52Z	21.6-26.4	18	111	102	10	5200	470	82
AM2D-2424SH52Z	21.6-26.4	24	83	100	13	5200	470	80
AM2D-4803SH52Z	43.2-52.8	3.3	400	53	5	5200	470	72
AM2D-4805SH52Z	43.2-52.8	5	400	53	5	5200	470	79
AM2D-4807SH52Z	43.2-52.8	7.2	278	52	10	5200	470	80
AM2D-4809SH52Z	43.2-52.8	9	222	52	10	5200	470	80
AM2D-4812SH52Z	43.2-52.8	12	167	50	10	5200	470	80
AM2D-4815SH52Z	43.2-52.8	15	134	52	8	5200	470	82
AM2D-4818SH52Z	43.2-52.8	18	111	51	8	5200	470	82
AM2D-4824SH52Z	43.2-52.8	24	83	51	10	5200	470	82
AM2D-0503SH60Z	4.5-5.5	3.3	400	513	16	6000	470	72
AM2D-0505SH60Z	4.5-5.5	5	400	488	20	6000	470	78
AM2D-0507SH60Z	4.5-5.5	7.2	278	494	22	6000	470	80
AM2D-0509SH60Z	4.5-5.5	9	222	476	35	6000	470	80
AM2D-0512SH60Z	4.5-5.5	12	167	470	30	6000	470	82
AM2D-0515SH60Z	4.5-5.5	15	134	465	25	6000	470	82
AM2D-0518SH60Z	4.5-5.5	18	111	494	25	6000	470	82
AM2D-0524SH60Z	4.5-5.5	24	83	471	22	6000	470	82
AM2D-1203SH60Z	10.8-13.2	3.3	400	242	20	6000	470	65
AM2D-1205SH60Z	10.8-13.2	5	400	203	20	6000	470	77
AM2D-1207SH60Z	10.8-13.2	7.2	278	201	15	6000	470	80
AM2D-1209SH60Z	10.8-13.2	9	222	201	17	6000	470	80
AM2D-1212SH60Z	10.8-13.2	12	167	196	15	6000	470	82
AM2D-1215SH60Z	10.8-13.2	15	134	196	20	6000	470	82
AM2D-1218SH60Z	10.8-13.2	18	111	198	18	6000	470	80
AM2D-1224SH60Z	10.8-13.2	24	83	201	15	6000	470	80
AM2D-2403SH60Z	21.6-26.4	3.3	400	107	5	6000	470	72
AM2D-2405SH60Z	21.6-26.4	5	400	104	10	6000	470	79
AM2D-2407SH60Z	21.6-26.4	7.2	278	104	10	6000	470	80
AM2D-2409SH60Z	21.6-26.4	9	222	100	10	6000	470	80
AM2D-2412SH60Z	21.6-26.4	12	167	98	8	6000	470	80
AM2D-2415SH60Z	21.6-26.4	15	134	99	8	6000	470	82
AM2D-2418SH60Z	21.6-26.4	18	111	102	10	6000	470	82
AM2D-2424SH60Z	21.6-26.4	24	83	100	13	6000	470	80
AM2D-4803SH60Z	43.2-52.8	3.3	400	53	5	6000	470	72

### Models

#### Single output (continued)

Model	Input Voltage (V)	Output Voltage (V)	Output Current Max (mA)	Input Current Full Load   No Load (mA)		Isolation (VDC)	Max Capacitive Load (μF)	Efficiency (%)
AM2D-4805SH60Z	43.2-52.8	5	400	53	5	6000	470	79
AM2D-4807SH60Z	43.2-52.8	7.2	278	52	10	6000	470	80
AM2D-4809SH60Z	43.2-52.8	9	222	52	10	6000	470	80
AM2D-4812SH60Z	43.2-52.8	12	167	50	10	6000	470	80
AM2D-4815SH60Z	43.2-52.8	15	134	52	8	6000	470	82
AM2D-4818SH60Z	43.2-52.8	18	111	51	8	6000	470	82
AM2D-4824SH60Z	43.2-52.8	24	83	51	10	6000	470	82

### Models

#### Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current Max (mA)	Input Current Full Load   No Load (mA)		Isolation (VDC)	Max Capacitive Load (μF)	Efficiency (%)
AM2D-0503DZ	4.5-5.5	±3.3	±200	506	20	1000	±220	65
AM2D-0505DZ	4.5-5.5	±5	±200	470	20	1000	±220	72
AM2D-0507DZ	4.5-5.5	±7.2	±139	482	25	1000	±220	72
AM2D-0509DZ	4.5-5.5	±9	±111	476	30	1000	±220	77
AM2D-0512DZ	4.5-5.5	±12	±83	471	30	1000	±220	78
AM2D-0515DZ	4.5-5.5	±15	±67	465	25	1000	±220	80
AM2D-0518DZ	4.5-5.5	±18	±55	500	32	1000	±220	80
AM2D-0524DZ	4.5-5.5	±24	±42	500	25	1000	±220	80
AM2D-1203DZ	10.8-13.2	±3.3	±200	219	12	1000	±220	67
AM2D-1205DZ	10.8-13.2	±5	±200	211	10	1000	±220	75
AM2D-1207DZ	10.8-13.2	±7.2	±139	201	16	1000	±220	76
AM2D-1209DZ	10.8-13.2	±9	±111	196	10	1000	±220	77
AM2D-1212DZ	10.8-13.2	±12	±83	194	13	1000	±220	82
AM2D-1215DZ	10.8-13.2	±15	±67	201	15	1000	±220	82
AM2D-1218DZ	10.8-13.2	±18	±55	198	18	1000	±220	82
AM2D-1224DZ	10.8-13.2	±24	±42	201	15	1000	±220	82
AM2D-2403DZ	21.6-26.4	±3.3	±200	110	10	1000	±220	68
AM2D-2405DZ	21.6-26.4	±5	±200	102	8	1000	±220	75
AM2D-2407DZ	21.6-26.4	±7.2	±139	104	10	1000	±220	75
AM2D-2409DZ	21.6-26.4	±9	±111	102	8	1000	±220	80
AM2D-2412DZ	21.6-26.4	±12	±83	100	8	1000	±220	82
AM2D-2415DZ	21.6-26.4	±15	±67	98	8	1000	±220	82
AM2D-2418DZ	21.6-26.4	±18	±55	102	10	1000	±220	82
AM2D-2424DZ	21.6-26.4	±24	±42	100	12	1000	±220	82
AM2D-4803DZ	43.2-52.8	±3.3	±200	53	5	1000	±220	68
AM2D-4805DZ	43.2-52.8	±5	±200	53	5	1000	±220	75
AM2D-4807DZ	43.2-52.8	±7.2	±139	52	10	1000	±220	75
AM2D-4809DZ	43.2-52.8	±9	±111	52	8	1000	±220	80
AM2D-4812DZ	43.2-52.8	±12	±83	50	5	1000	±220	82
AM2D-4815DZ	43.2-52.8	±15	±67	52	8	1000	±220	82
AM2D-4818DZ	43.2-52.8	±18	±55	51	8	1000	±220	82
AM2D-4824DZ	43.2-52.8	±24	±42	51	10	1000	±220	82
				506	20			
AM2D-0503DH30Z	4.5-5.5	±3.3	±200	470	20	3000	±220	65
AM2D-0505DH30Z	4.5-5.5	±5	±200	482	25	3000	±220	72
AM2D-0507DH30Z	4.5-5.5	±7.2	±139	476	30	3000	±220	72
AM2D-0509DH30Z	4.5-5.5	±9	±111	471	30	3000	±220	77
AM2D-0512DH30Z	4.5-5.5	±12	±83	465	25	3000	±220	78
AM2D-0515DH30Z	4.5-5.5	±15	±67	500	32	3000	±220	80
AM2D-0518DH30Z	4.5-5.5	±18	±55	500	25	3000	±220	80
AM2D-0524DH30Z	4.5-5.5	±24	±42	219	12	3000	±220	80

## Models

### Dual output (continued)

Model	Input Voltage (V)	Output Voltage (V)	Output Current Max (mA)	Input Current Full Load   No Load (mA)		Isolation (VDC)	Max Capacitive Load (μF)	Efficiency (%)
AM2D-1203DH30Z	10.8-13.2	±3.3	±200	211	10	3000	±220	67
AM2D-1205DH30Z	10.8-13.2	±5	±200	201	16	3000	±220	75
AM2D-1207DH30Z	10.8-13.2	±7.2	±139	196	10	3000	±220	76
AM2D-1209DH30Z	10.8-13.2	±9	±111	194	13	3000	±220	77
AM2D-1212DH30Z	10.8-13.2	±12	±83	201	15	3000	±220	82
AM2D-1215DH30Z	10.8-13.2	±15	±67	198	18	3000	±220	82
AM2D-1218DH30Z	10.8-13.2	±18	±55	201	15	3000	±220	82
AM2D-1224DH30Z	10.8-13.2	±24	±42	110	10	3000	±220	82
AM2D-2403DH30Z	21.6-26.4	±3.3	±200	102	8	3000	±220	68
AM2D-2405DH30Z	21.6-26.4	±5	±200	104	10	3000	±220	75
AM2D-2407DH30Z	21.6-26.4	±7.2	±139	102	8	3000	±220	75
AM2D-2409DH30Z	21.6-26.4	±9	±111	100	8	3000	±220	80
AM2D-2412DH30Z	21.6-26.4	±12	±83	98	8	3000	±220	82
AM2D-2415DH30Z	21.6-26.4	±15	±67	102	10	3000	±220	82
AM2D-2418DH30Z	21.6-26.4	±18	±55	100	12	3000	±220	82
AM2D-2424DH30Z	21.6-26.4	±24	±42	53	5	3000	±220	82
AM2D-4803DH30Z	43.2-52.8	±3.3	±200	53	5	3000	±220	68
AM2D-4805DH30Z	43.2-52.8	±5	±200	52	10	3000	±220	75
AM2D-4807DH30Z	43.2-52.8	±7.2	±139	52	8	3000	±220	75
AM2D-4809DH30Z	43.2-52.8	±9	±111	50	5	3000	±220	80
AM2D-4812DH30Z	43.2-52.8	±12	±83	52	8	3000	±220	82
AM2D-4815DH30Z	43.2-52.8	±15	±67	51	8	3000	±220	82
AM2D-4818DH30Z	43.2-52.8	±18	±55	51	10	3000	±220	82
AM2D-4824DH30Z	43.2-52.8	±24	±42	506	20	3000	±220	82
AM2D-0503DH40Z	4.5-5.5	±3.3	±200	506	20	4000	±220	65
AM2D-0505DH40Z	4.5-5.5	±5	±200	470	20	4000	±220	72
AM2D-0507DH40Z	4.5-5.5	±7.2	±139	482	25	4000	±220	72
AM2D-0509DH40Z	4.5-5.5	±9	±111	476	30	4000	±220	77
AM2D-0512DH40Z	4.5-5.5	±12	±83	471	30	4000	±220	78
AM2D-0515DH40Z	4.5-5.5	±15	±67	465	25	4000	±220	80
AM2D-0518DH40Z	4.5-5.5	±18	±55	500	32	4000	±220	80
AM2D-0524DH40Z	4.5-5.5	±24	±42	500	25	4000	±220	80
AM2D-1203DH40Z	10.8-13.2	±3.3	±200	219	12	4000	±220	67
AM2D-1205DH40Z	10.8-13.2	±5	±200	211	10	4000	±220	75
AM2D-1207DH40Z	10.8-13.2	±7.2	±139	201	16	4000	±220	76
AM2D-1209DH40Z	10.8-13.2	±9	±111	196	10	4000	±220	77
AM2D-1212DH40Z	10.8-13.2	±12	±83	194	13	4000	±220	82
AM2D-1215DH40Z	10.8-13.2	±15	±67	201	15	4000	±220	82
AM2D-1218DH40Z	10.8-13.2	±18	±55	198	18	4000	±220	82
AM2D-1224DH40Z	10.8-13.2	±24	±42	201	15	4000	±220	82
AM2D-2403DH40Z	21.6-26.4	±3.3	±200	110	10	4000	±220	68
AM2D-2405DH40Z	21.6-26.4	±5	±200	102	8	4000	±220	75
AM2D-2407DH40Z	21.6-26.4	±7.2	±139	104	10	4000	±220	75
AM2D-2409DH40Z	21.6-26.4	±9	±111	102	8	4000	±220	80
AM2D-2412DH40Z	21.6-26.4	±12	±83	100	8	4000	±220	82
AM2D-2415DH40Z	21.6-26.4	±15	±67	98	8	4000	±220	82
AM2D-2418DH40Z	21.6-26.4	±18	±55	102	10	4000	±220	82
AM2D-2424DH40Z	21.6-26.4	±24	±42	100	12	4000	±220	82
AM2D-4803DH40Z	43.2-52.8	±3.3	±200	53	5	4000	±220	68
AM2D-4805DH40Z	43.2-52.8	±5	±200	53	5	4000	±220	75
AM2D-4807DH40Z	43.2-52.8	±7.2	±139	52	10	4000	±220	75
AM2D-4809DH40Z	43.2-52.8	±9	±111	52	8	4000	±220	80
AM2D-4812DH40Z	43.2-52.8	±12	±83	50	5	4000	±220	82
AM2D-4815DH40Z	43.2-52.8	±15	±67	52	8	4000	±220	82



## Models

### Dual output (continued)

Model	Input Voltage (V)	Output Voltage (V)	Output Current Max (mA)	Input Current Full Load   No Load (mA)		Isolation (VDC)	Max Capacitive Load (μF)	Efficiency (%)
AM2D-4818DH40Z	43.2-52.8	±18	±55	51	8	4000	±220	82
AM2D-4824DH40Z	43.2-52.8	±24	±42	51	10	4000	±220	82
AM2D-0503DH52Z	4.5-5.5	±3.3	±200	506	20	5200	±220	65
AM2D-0505DH52Z	4.5-5.5	±5	±200	470	20	5200	±220	72
AM2D-0507DH52Z	4.5-5.5	±7.2	±139	482	25	5200	±220	72
AM2D-0509DH52Z	4.5-5.5	±9	±111	476	30	5200	±220	77
AM2D-0512DH52Z	4.5-5.5	±12	±83	471	30	5200	±220	78
AM2D-0515DH52Z	4.5-5.5	±15	±67	465	25	5200	±220	80
AM2D-0518DH52Z	4.5-5.5	±18	±55	500	32	5200	±220	80
AM2D-0524DH52Z	4.5-5.5	±24	±42	500	25	5200	±220	80
AM2D-1203DH52Z	10.8-13.2	±3.3	±200	219	12	5200	±220	67
AM2D-1205DH52Z	10.8-13.2	±5	±200	211	10	5200	±220	75
AM2D-1207DH52Z	10.8-13.2	±7.2	±139	201	16	5200	±220	76
AM2D-1209DH52Z	10.8-13.2	±9	±111	196	10	5200	±220	77
AM2D-1212DH52Z	10.8-13.2	±12	±83	194	13	5200	±220	82
AM2D-1215DH52Z	10.8-13.2	±15	±67	201	15	5200	±220	82
AM2D-1218DH52Z	10.8-13.2	±18	±55	198	18	5200	±220	82
AM2D-1224DH52Z	10.8-13.2	±24	±42	201	15	5200	±220	82
AM2D-2403DH52Z	21.6-26.4	±3.3	±200	110	10	5200	±220	68
AM2D-2405DH52Z	21.6-26.4	±5	±200	102	8	5200	±220	75
AM2D-2407DH52Z	21.6-26.4	±7.2	±139	104	10	5200	±220	75
AM2D-2409DH52Z	21.6-26.4	±9	±111	102	8	5200	±220	80
AM2D-2412DH52Z	21.6-26.4	±12	±83	100	8	5200	±220	82
AM2D-2415DH52Z	21.6-26.4	±15	±67	98	8	5200	±220	82
AM2D-2418DH52Z	21.6-26.4	±18	±55	102	10	5200	±220	82
AM2D-2424DH52Z	21.6-26.4	±24	±42	100	12	5200	±220	82
AM2D-4803DH52Z	43.2-52.8	±3.3	±200	53	5	5200	±220	68
AM2D-4805DH52Z	43.2-52.8	±5	±200	53	5	5200	±220	75
AM2D-4807DH52Z	43.2-52.8	±7.2	±139	52	10	5200	±220	75
AM2D-4809DH52Z	43.2-52.8	±9	±111	52	8	5200	±220	80
AM2D-4812DH52Z	43.2-52.8	±12	±83	50	5	5200	±220	82
AM2D-4815DH52Z	43.2-52.8	±15	±67	52	8	5200	±220	82
AM2D-4818DH52Z	43.2-52.8	±18	±55	51	8	5200	±220	82
AM2D-4824DH52Z	43.2-52.8	±24	±42	51	10	5200	±220	82
AM2D-0503DH60Z	4.5-5.5	±3.3	±200	506	20	6000	±220	65
AM2D-0505DH60Z	4.5-5.5	±5	±200	470	20	6000	±220	72
AM2D-0507DH60Z	4.5-5.5	±7.2	±139	482	25	6000	±220	72
AM2D-0509DH60Z	4.5-5.5	±9	±111	476	30	6000	±220	77
AM2D-0512DH60Z	4.5-5.5	±12	±83	471	30	6000	±220	78
AM2D-0515DH60Z	4.5-5.5	±15	±67	465	25	6000	±220	80
AM2D-0518DH60Z	4.5-5.5	±18	±55	500	32	6000	±220	80
AM2D-0524DH60Z	4.5-5.5	±24	±42	500	25	6000	±220	80
AM2D-1203DH60Z	10.8-13.2	±3.3	±200	219	12	6000	±220	67
AM2D-1205DH60Z	10.8-13.2	±5	±200	211	10	6000	±220	75
AM2D-1207DH60Z	10.8-13.2	±7.2	±139	201	16	6000	±220	76
AM2D-1209DH60Z	10.8-13.2	±9	±111	196	10	6000	±220	77
AM2D-1212DH60Z	10.8-13.2	±12	±83	194	13	6000	±220	82
AM2D-1215DH60Z	10.8-13.2	±15	±67	201	15	6000	±220	82
AM2D-1218DH60Z	10.8-13.2	±18	±55	198	18	6000	±220	82
AM2D-1224DH60Z	10.8-13.2	±24	±42	201	15	6000	±220	82
AM2D-2403DH60Z	21.6-26.4	±3.3	±200	110	10	6000	±220	68
AM2D-2405DH60Z	21.6-26.4	±5	±200	102	8	6000	±220	75
AM2D-2407DH60Z	21.6-26.4	±7.2	±139	104	10	6000	±220	75

## Models

### Dual output (continued)

Model	Input Voltage (V)	Output Voltage (V)	Output Current Max (mA)	Input Current Full Load   No Load (mA)		Isolation (VDC)	Max Capacitive Load (μF)	Efficiency (%)
AM2D-2409DH60Z	21.6-26.4	±9	±111	102	8	6000	±220	80
AM2D-2412DH60Z	21.6-26.4	±12	±83	100	8	6000	±220	82
AM2D-2415DH60Z	21.6-26.4	±15	±67	98	8	6000	±220	82
AM2D-2418DH60Z	21.6-26.4	±18	±55	102	10	6000	±220	82
AM2D-2424DH60Z	21.6-26.4	±24	±42	100	12	6000	±220	82
AM2D-4803DH60Z	43.2-52.8	±3.3	±200	53	5	6000	±220	68
AM2D-4805DH60Z	43.2-52.8	±5	±200	53	5	6000	±220	75
AM2D-4807DH60Z	43.2-52.8	±7.2	±139	52	10	6000	±220	75
AM2D-4809DH60Z	43.2-52.8	±9	±111	52	8	6000	±220	80
AM2D-4812DH60Z	43.2-52.8	±12	±83	50	5	6000	±220	82
AM2D-4815DH60Z	43.2-52.8	±15	±67	52	8	6000	±220	82
AM2D-4818DH60Z	43.2-52.8	±18	±55	51	8	6000	±220	82
AM2D-4824DH60Z	43.2-52.8	±24	±42	51	10	6000	±220	82

## Models

### Dual separated output

Model	Input Voltage (V)	Output Voltage (V)	Output Current Max (mA)	Input Current Full Load   No Load (mA)		Isolation (VDC)	Max Capacitive Load (μF)	Efficiency (%)
AM2D-050303DZ	4.5-5.5	3.3 / 3.3	200 / 200	588	25	1000	±220	73
AM2D-050505DZ	4.5-5.5	5 / 5	200 / 200	548	25	1000	±220	78
AM2D-050707DZ	4.5-5.5	7.2 / 7.2	139 / 139	519	25	1000	±220	75
AM2D-050909DZ	4.5-5.5	9 / 9	111 / 111	506	30	1000	±220	78
AM2D-051212DZ	4.5-5.5	12 / 12	83 / 83	494	30	1000	±220	82
AM2D-051515DZ	4.5-5.5	15 / 15	67 / 67	488	30	1000	±220	82
AM2D-051818DZ	4.5-5.5	18 / 18	55 / 55	482	26	1000	±220	79
AM2D-052424DZ	4.5-5.5	24 / 24	42 / 42	488	30	1000	±220	75
AM2D-120303DZ	10.8-13.2	3.3 / 3.3	200 / 200	245	10	1000	±220	73
AM2D-120505DZ	10.8-13.2	5 / 5	200 / 200	225	18	1000	±220	78
AM2D-120707DZ	10.8-13.2	7.2 / 7.2	139 / 139	211	15	1000	±220	75
AM2D-120909DZ	10.8-13.2	9 / 9	111 / 111	203	13	1000	±220	78
AM2D-121212DZ	10.8-13.2	12 / 12	83 / 83	203	23	1000	±220	82
AM2D-121515DZ	10.8-13.2	15 / 15	67 / 67	201	20	1000	±220	82
AM2D-121818DZ	10.8-13.2	18 / 18	55 / 55	198	16	1000	±220	78
AM2D-122424DZ	10.8-13.2	24 / 24	42 / 42	196	15	1000	±220	75
AM2D-240303DZ	21.6-26.4	3.3 / 3.3	200 / 200	117	6	1000	±220	73
AM2D-240505DZ	21.6-26.4	5 / 5	200 / 200	111	7	1000	±220	78
AM2D-240707DZ	21.6-26.4	7.2 / 7.2	139 / 139	110	12	1000	±220	75
AM2D-240909DZ	21.6-26.4	9 / 9	111 / 111	103	7	1000	±220	78
AM2D-241212DZ	21.6-26.4	12 / 12	83 / 83	99	6	1000	±220	82
AM2D-241515DZ	21.6-26.4	15 / 15	67 / 67	98	6	1000	±220	82
AM2D-241818DZ	21.6-26.4	18 / 18	55 / 55	97	6	1000	±220	75
AM2D-242424DZ	21.6-26.4	24 / 24	42 / 42	97	8	1000	±220	75
AM2D-480303DZ	43.2-52.8	3.3 / 3.3	200 / 200	56	5	1000	±220	78
AM2D-480505DZ	43.2-52.8	5 / 5	200 / 200	56	4	1000	±220	78
AM2D-480707DZ	43.2-52.8	7.2 / 7.2	139 / 139	53	5	1000	±220	78
AM2D-480909DZ	43.2-52.8	9 / 9	111 / 111	54	5	1000	±220	78
AM2D-481212DZ	43.2-52.8	12 / 12	83 / 83	50	4	1000	±220	80
AM2D-481515DZ	43.2-52.8	15 / 15	67 / 67	50	5	1000	±220	80
AM2D-481818DZ	43.2-52.8	18 / 18	55 / 55	52	6	1000	±220	80
AM2D-482424DZ	43.2-52.8	24 / 24	42 / 42	52	6	1000	±220	80

### Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	5	4.5-5.5		VDC
	12	10.8-13.2		
	24	21.6-26.4		
	48	43.2-52.8		
Filter	Capacitor			
Turn on Transient process time			25	ms
Start up time		200		ms
Absolute Maximum Rating	5 Vin	0-7		VDC
	12 Vin	0-15		
	24 Vin	0-28		
	48 Vin	0-54		
Peak Input Voltage time		100		ms
Input Reflected Ripple Current		20		mA p-p

### Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60sec		1000, 3000, 4000, 5200, 6000	VDC
Resistance		> 1000		MOhm
Capacitance		60		pF

### Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±3		%
Voltage balance	Dual output	±1		%
Short Circuit protection		Momentary (1sec).		
Line voltage regulation (Single)	For 1.0% of Vin	±1.2		%
Line voltage regulation (Dual)	For 1.0% of Vin	±1.2		%
Load voltage regulation (Single)	Load 20~100%	±10		%
Load voltage regulation (Single) 3.3V output model	Load 20~100%	±20		%
Load voltage regulation (Dual)	Load 20~100%	±10		%
Load voltage regulation (Dual) 3.3V output model	Load 20~100%	±20		%
Temperature coefficient		±0.02		%/°C
Ripple & Noise	At 20MHz Bandwidth	75		mV p-p
Capacitive load	Single output		470	μF
	Dual output		220	μF
Rising time		100		ms

### General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	85		KHz
Operating temperature	Full Load	-40 to +85		°C
Storage temperature		-55 to +125		°C
Max Case temperature			+95	°C
Cooling	Free air convection			
Humidity			90	%
Case material	Plastic UL94-VO			
Weight		2.5		g
Dimensions (L x W x H)	0.76 x 0.24 x 0.37 inch 19.50 x 6.00 x 9.50 mm			
MTBF	>1 121 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)			

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified



## Safety Specifications

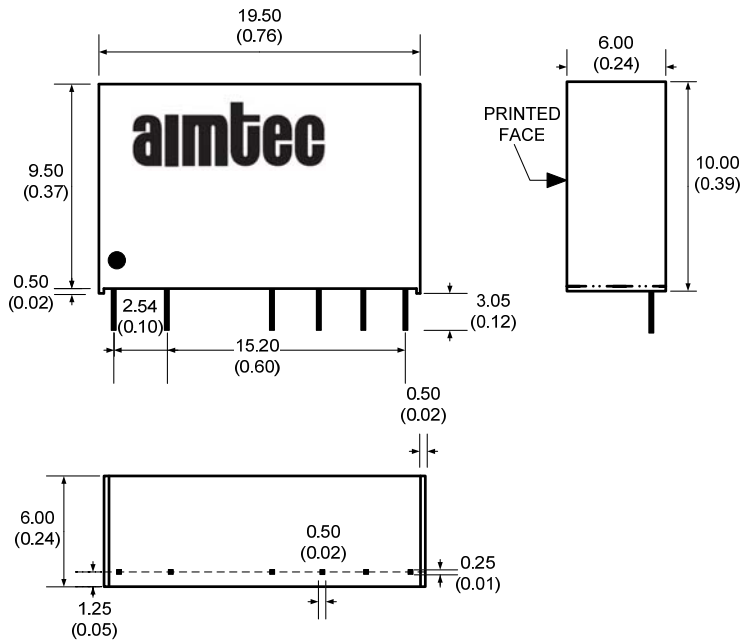
### Parameters

Agency approvals	CE (Except dual separated models)
Standards	EN55022 (Radiated Emissions) class B
	EN55024 (Noise Immunity), IEC61000-4-2(ESD)
	IEC61000-4-3(Radiated immunity)

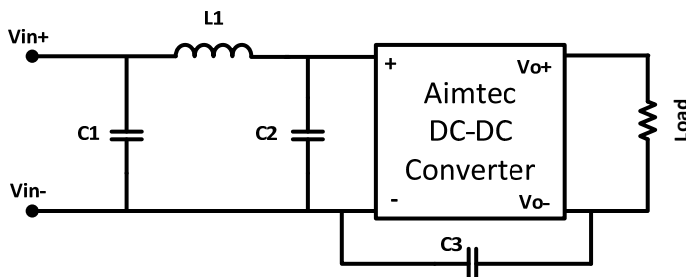
## Pin Out Specifications

Pin	1000 VDC			3000, 4000 , 5200, 6000 VDC	
	Single	Dual	Dual separated	Single	Dual
1	+ V Input	+ V Input	+ V Input	+ V Input	+ V Input
2	- V Input	- V Input	- V Input	- V Input	- V Input
4	- V Output	- V Output	+V1 Output	No pin	No pin
5	No pin	Common	-V1 Output	-V Output	-V Output
6	+ V Output	+ V Output	+V2 Output	No pin	Common
7	No pin	No pin	-V2 Output	+V Output	+V Output

## Dimensions



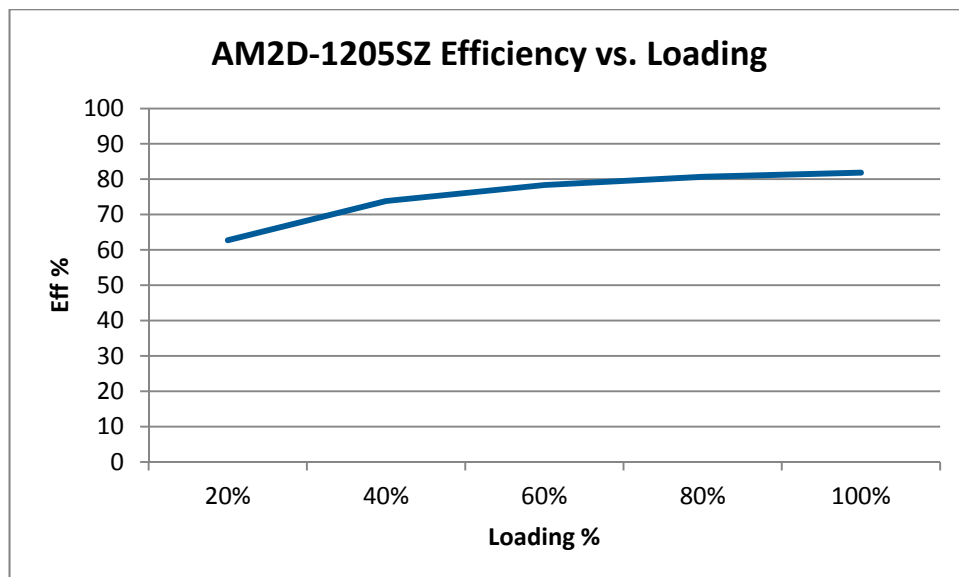
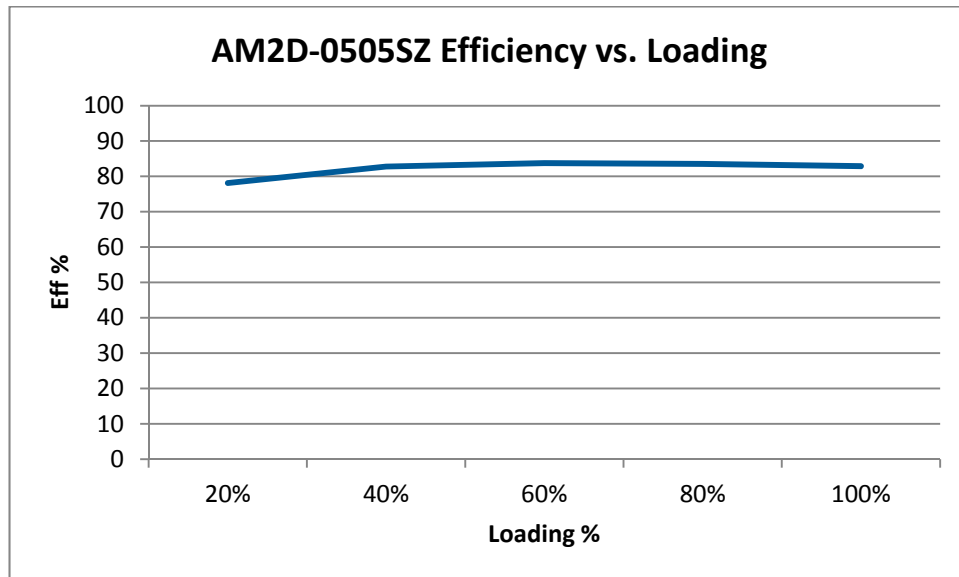
## EMI Filter Circuit

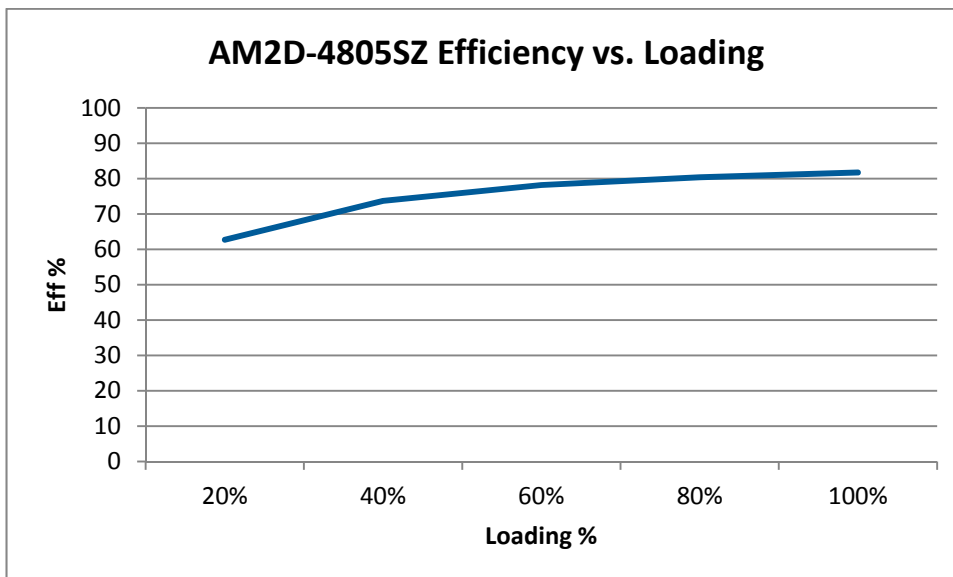
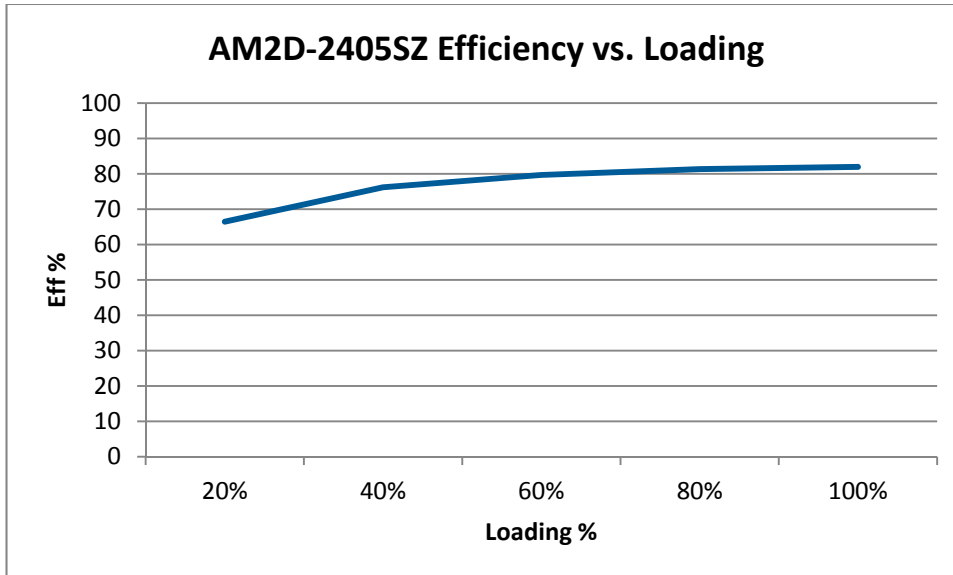


Vin	C1	L1	C2	C3
3Vin	2.2 $\mu$ F/100V	18 $\mu$ H	-	-
5Vin	2.2 $\mu$ F/100V	18 $\mu$ H	-	-
12Vin	2.2 $\mu$ F/100V	18 $\mu$ H	-	-
15Vin	2.2 $\mu$ F/100V	18 $\mu$ H	-	-
24Vin	2.2 $\mu$ F/100V	18 $\mu$ H	2.2 $\mu$ F/100V	470 pF/2kV
48Vin	10 $\mu$ F/100V *	18 $\mu$ H	2.2 $\mu$ F/100V	470 pF/2kV

\* Electrolytic Type

## Typical Efficiency Chart Examples





**NOTE:** 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to [www.aimtec.com](http://www.aimtec.com) for the most current product specifications. 2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. 3. Mechanical drawings and specifications are for reference only. 4. All specifications are measured at an ambient temperature of 25°C, humidity < 75%, nominal input voltage and at rated output load unless otherwise specified. 5. Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. 6. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other than the ones listed in this datasheet. 7. Warranty is in accordance with Aimtec's standard Terms of Sale available at [www.aimtec.com](http://www.aimtec.com).