

# Hi-Rel DC-DC Converters

## SELECTOR GUIDE



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## Space DC-DC Converters

Part Number	P <sub>OUT</sub> (W)	V <sub>OUT</sub> (V)	I <sub>OUT</sub> (A)	V <sub>IN</sub> <sup>1</sup> (V)	Package Dimensions (inches) <sup>2</sup>
TID>25K rads(si), SEE>37MeVcm2/mg, Neutron fluence>3E12 Neutrons/cm, Dose Rate>1E10 rads(si)/sec					
<b>SINGLE</b>					
M3L2803R3S	20	+3.3	6.06	16-50	2.3 x 1.5 x 0.405
M3L2805S	25	+5	5	16-50	2.3 x 1.5 x 0.405
M3L2805R2S	25	+5.2	4.8	16-50	2.3 x 1.5 x 0.405
M3L2812S	25	+12	2.08	16-50	2.3 x 1.5 x 0.405
M3L2815S	25	+15	1.67	16-50	2.3 x 1.5 x 0.405
M3L2828S	25	+28	0.89	16-50	2.3 x 1.5 x 0.405
M3H2803R3S	30	+3.3	9.1	18-50	3.0 x 2.05 x 0.405
M3H2805S	40	+5	8	18-50	3.0 x 2.05 x 0.405
M3H2805R2S	40	+5.2	7.69	18-50	3.0 x 2.05 x 0.405
M3H2812S	40	+12	3.34	18-50	3.0 x 2.05 x 0.405
M3H2815S	40	+15	2.67	18-50	3.0 x 2.05 x 0.405
M3H2828S	40	+28	1.43	18-50	3.0 x 2.05 x 0.405
<b>DUAL</b>					
M3L2805D	25	±5	±4	16-50	2.3 x 1.5 x 0.405
M3L2812D	25	±12	±1.67	16-50	2.3 x 1.5 x 0.405
M3L2815D	25	±15	±1.33	16-50	2.3 x 1.5 x 0.405
M3H2805D	40	±5	±6.4	18-50	3.0 x 2.05 x 0.405
M3H2812D	40	±12	±2.67	18-50	3.0 x 2.05 x 0.405
M3H2815D	40	±15	±2.14	18-50	3.0 x 2.05 x 0.405
<b>TRIPLE</b>					
M3H2803R305T	40	+3.3, ±5	4, ±2	18-50	3.0 x 2.05 x 0.405
M3H2803R312T	40	+3.3, ±12	4, ±0.833	18-50	3.0 x 2.05 x 0.405
M3H2803R315T	40	+3.3, ±15	4, ±0.667	18-50	3.0 x 2.05 x 0.405
M3H280505T	40	+5, ±5	4, ±2	18-50	3.0 x 2.05 x 0.405
M3H280512T	40	+5, ±12	4, ±0.833	18-50	3.0 x 2.05 x 0.405
M3H280515T	40	+5, ±15	4, ±0.667	18-50	3.0 x 2.05 x 0.405
TID>30K rads(si), SEE>60MeVcm2/mg, Neutron fluence>3E12 Neutrons/cm, Dose Rate>1E10 rads(si)/sec					
<b>SINGLE</b>					
AMA2803R3S	3.3	+3.3	1	16-40	1.13 x 1.13 x 0.33
AMA2805S	5	+5	1	16-40	1.13 x 1.13 x 0.33
AMA2812S	5	+12	0.416	16-40	1.13 x 1.13 x 0.33
AMA2815S	5	+15	0.333	16-40	1.13 x 1.13 x 0.33
AMF2803R3S	10	+3.3	3	16-40	1.6 x 1.38 x 0.33
AMF2805S	12	+5	2.4	16-40	1.6 x 1.38 x 0.33
AMF2812S	12	+12	1	16-40	1.6 x 1.38 x 0.33
AMF2815S	12	+15	0.8	16-40	1.6 x 1.38 x 0.33
AMR2803R3S	16.5	+3.3	5	16-40	2.14 x 1.53 x 0.41
AMR2805S	30	+5	6	16-40	2.14 x 1.53 x 0.41
AMR2812S	30	+12	2.5	16-40	2.14 x 1.53 x 0.41
AMR2815S	30	+15	2	16-40	2.14 x 1.53 x 0.41
<b>DUAL</b>					
AMA2805D	5	±5	±0.5	16-40	1.13 x 1.13 x 0.33
AMA2812D	5	±12	±0.208	16-40	1.13 x 1.13 x 0.33
AMA2815D	5	±15	±0.166	16-40	1.13 x 1.13 x 0.33
AMF2805D	12	±5	±1.2	16-40	1.6 x 1.38 x 0.33
AMF2812D	12	±12	±0.5	16-40	1.6 x 1.38 x 0.33
AMF2815D	12	±15	±0.4	16-40	1.6 x 1.38 x 0.33
AMR2805D	30	±5	±3	16-40	2.14 x 1.53 x 0.41
AMR2812D	30	±12	±1.25	16-40	2.14 x 1.53 x 0.41
AMR2815D	30	±15	±1	16-40	2.14 x 1.53 x 0.41

## Space DC-DC Converters

Part Number	P <sub>OUT</sub> (W)	V <sub>OUT</sub> (V)	I <sub>OUT</sub> (A)	V <sub>IN</sub> <sup>1</sup> (V)	Package Dimensions (inches) <sup>2</sup>
TID>30K rads(si), SEE>60MeVcm <sup>2</sup> /mg, Neutron fluence>3E12 Neutrons/cm, Dose Rate>1E10 rads(si)/sec					
<b>TRIPLE</b>					
AMR2812T	30	+5, ±12	4, ±0.625	16-40	2.14 x 1.53 x 0.41
AMR2815T	30	+5, ±15	4, ±0.5	16-40	2.14 x 1.53 x 0.41
TID>100K rads(si), SEE>37 MeVcm <sup>2</sup> /mg, Neutron fluence>8E12 Neutrons/cm, Dose Rate>4E10 rads(si)/sec					
<b>SINGLE</b>					
S2803R3S	10	+3.3	3.03	18-40	1.71 x 1.31 x 0.425
S2805S	10	+5	2	18-40	1.71 x 1.31 x 0.425
S2812S	10	+12	0.833	18-40	1.71 x 1.31 x 0.425
S2815S	10	+15	0.67	18-40	1.71 x 1.31 x 0.425
Z2801R5S	30	+1.5	20	22-40	3.5 x 2.4 x 0.575
Z2802R5S	50	+2.5	20	22-40	3.5 x 2.4 x 0.575
Z2803R3S	66	+3.3	20	22-40	3.5 x 2.4 x 0.575
Z2805S	100	+5	20	22-40	3.5 x 2.4 x 0.575
<b>DUAL</b>					
S2805D	10	±5	±1	18-40	1.71 x 1.31 x 0.425
S2812D	10	±12	±0.417	18-40	1.71 x 1.31 x 0.425
S2815D	10	±15	±0.333	18-40	1.71 x 1.31 x 0.425
TID>200K rads(si), SEE>82MeVcm <sup>2</sup> /mg, Neutron fluence>8E12 Neutrons/cm, Dose Rate>4E10 rads(si)/sec					
<b>SINGLE</b>					
M3G2803R3S	30	+3.3	9.1	18-60	3.0 x 2.05 x 0.405
M3G2805S	40	+5	8	18-60	3.0 x 2.05 x 0.405
M3G2805R2S	40	+5.2	7.69	18-60	3.0 x 2.05 x 0.405
M3G2812S	40	+12	3.34	18-60	3.0 x 2.05 x 0.405
M3G2815S	40	+15	2.67	18-60	3.0 x 2.05 x 0.405
M3G2828S	40	+28	1.43	18-60	3.0 x 2.05 x 0.405
M3G5003R3S	30	+3.3	9.1	38-60	3.0 x 2.05 x 0.405
M3G5005S	40	+5	8	38-60	3.0 x 2.05 x 0.405
M3G5005R2S	40	+5.2	7.69	38-60	3.0 x 2.05 x 0.405
M3G5012S	40	+12	3.34	38-60	3.0 x 2.05 x 0.405
M3G5015S	40	+15	42.67	38-60	3.0 x 2.05 x 0.405
M3G5028S	40	+28	1.43	38-60	3.0 x 2.05 x 0.405
M3G7003R3S	30	+3.3	9.1	60-120	3.0 x 2.05 x 0.405
M3G7005S	40	+5	8	60-120	3.0 x 2.05 x 0.405
M3G7005R2S	40	+5.2	7.69	60-120	3.0 x 2.05 x 0.405
M3G7012S	40	+12	3.34	60-120	3.0 x 2.05 x 0.405
M3G7015S	40	+15	2.67	60-120	3.0 x 2.05 x 0.405
M3G7028S	40	+28	1.43	60-120	3.0 x 2.05 x 0.405
<b>DUAL</b>					
M3G2805D	40	±5	±6.4	18-60	3.0 x 2.05 x 0.405
M3G2812D	40	±12	±2.67	18-60	3.0 x 2.05 x 0.405
M3G2815D	40	±15	±2.14	18-60	3.0 x 2.05 x 0.405

## Space DC-DC Converters

Part Number	P <sub>OUT</sub> (W)	V <sub>OUT</sub> (V)	I <sub>OUT</sub> (A)	V <sub>IN</sub> <sup>1</sup> (V)	Package Dimensions (inches) <sup>2</sup>
TID>200K rads(si), SEE>82MeVcm <sup>2</sup> /mg, Neutron fluence>8E12 Neutrons/cm, Dose Rate>4E10 rads(si)/sec					
<b>DUAL continued...</b>					
M3G5005D	40	±5	±6.4	38-60	3.0 x 2.05 x 0.405
M3G5012D	40	±12	±2.67	38-60	3.0 x 2.05 x 0.405
M3G5015D	40	±15	±2.14	38-60	3.0 x 2.05 x 0.405
M3G7005D	40	±5	±6.4	60-120	3.0 x 2.05 x 0.405
M3G7012D	40	±12	±2.67	60-120	3.0 x 2.05 x 0.405
M3G7015D	40	±15	±2.14	60-120	3.0 x 2.05 x 0.405
TID>200K rads(si), SEE>82MeVcm <sup>2</sup> /mg, Neutron fluence>8E12 Neutrons/cm, Dose Rate>4E10 rads(si)/sec					
<b>TRIPLE</b>					
M3G280505T	40	+5, ±5	4, ±2	18-60	3.0 x 2.05 x 0.405
M3G280512T	40	+5, ±12	4, ±0.833	18-60	3.0 x 2.05 x 0.405
M3G280515T	40	+5, ±15	4, ±0.667	18-60	3.0 x 2.05 x 0.405
M3G500505T	40	+5, ±5	4, ±2	38-60	3.0 x 2.05 x 0.405
M3G500512T	40	+5, ±12	4, ±0.833	38-60	3.0 x 2.05 x 0.405
M3G500515T	40	+5, ±15	4, ±0.667	38-60	3.0 x 2.05 x 0.405
M3G700505T	40	+5, ±5	4, ±2	60-120	3.0 x 2.05 x 0.405
M3G700512T	40	+5, ±12	4, ±0.833	60-120	3.0 x 2.05 x 0.405
M3G700515T	40	+5, ±15	4, ±0.667	60-120	3.0 x 2.05 x 0.405
TID>200K rads(si), SEE>82MeVcm <sup>2</sup> /mg, Neutron fluence>8E12 Neutrons/cm, Dose Rate>4E10 rads(si)/sec					
<b>SINGLE</b>					
ARH2803R3S	30	+3.3	9	19-50	2.7 x 1.675 x 0.5
ARH2805S	30	+5	6	19-50	2.7 x 1.675 x 0.5
ARH2805R2S	30	+5.2	5.7	19-50	2.7 x 1.675 x 0.5
ARH2812S	30	+12	2.5	19-50	2.7 x 1.675 x 0.5
ARH2815S	30	+15	2	19-50	2.7 x 1.675 x 0.5
ARH2828S	30	+28	1.07	19-50	2.7 x 1.675 x 0.5
ARH5003R3S	30	+3.3	9	48-56	2.9 x 1.88 x 0.5
ARH5005S	30	+5	6	48-56	2.9 x 1.88 x 0.5
ARH5005R2S	30	+5.2	5.7	48-56	2.9 x 1.88 x 0.5
ARH5012S	30	+12	2.5	48-56	2.9 x 1.88 x 0.5
ARH5015S	30	+15	2	48-56	2.9 x 1.88 x 0.5
ARH5028S	30	+28	1.07	48-56	2.9 x 1.88 x 0.5
<b>TRIPLE</b>					
ART2812T	30	+5, ±12	3, ±0.625	19-60	2.7 x 1.675 x 0.5
ART2815T	30	+5, ±15	3, ±0.5	19-60	2.7 x 1.675 x 0.5
TID>1000K rads(si), SEE>82MeVcm <sup>2</sup> /mg, Neutron fluence>8E12 Neutrons/cm, Dose Rate>4E10 rads(si)/sec					
<b>TRIPLE</b>					
ARM2812T	30	+5, ±12	3, ±0.625	19-60	2.7 x 1.675 x 0.5
ARM2815T	30	+5, ±15	3, ±0.5	19-60	2.7 x 1.675 x 0.5

Note 1: Consult Factory for other input voltages.

Note 2: Dimensions exclude mounting tabs and input/output pins. Please refer to data sheets for detailed case outline information.

## Hybrid EMI Filters

(MIL-STD-461)

Part Number	DSCC SID Part Number	Compatible With Following Converters	V <sub>IN</sub> Range(V)	Max. Input Current (A)	Package Dimensions (inches) <sup>2</sup>
AFC461	91020	ATW, AHF, AHV, ATR ATO, AHE, AMF, AMR	0-40	4	2.12 x 1.12 x 0.38
AFM704A	95010	All converters except AFL	0-40 400 (Transient)	2.5 (@16V) 1.4 (@28V) 1.0 (@40V)	2.12 x 1.12 x 0.38
AFV461	91020	AHV, ATW, AHF, ATR ATO, AHE, AMF, AMR	0-80	4	2.12 x 1.12 x 0.38
AME270461	98026	AFL270XX, AFL120XX	0-400	1.5	2.5 x 1.5 x 0.38
AME28461	98027	AFL28XX	0-50	15	2.5 x 1.5 x 0.38
AME50461	Pending	AFL50XX	0-100	8	2.5 x 1.5 x 0.38
AMH461	Pending	AHF, ASA, AMA, AMF	0-50	2	1.45 x 1.12 x 0.331
ARF461	N/A	ART, ARH	0-80	5	1.73 x 1.67 x 0.5
ASF461	N/A	ASA, AHF, AMA, AMF	0-50	0.92	1.075 x 1.075 x 0.35

Note 2: Dimensions exclude mounting tabs and input/output pins. Please refer to data sheets for detailed case outline information.



## Standard DC-DC Converters

Part Number	DSCC SMD Part Number	P <sub>OUT</sub> (W)	V <sub>OUT</sub> (V)	I <sub>OUT</sub> (A)	V <sub>IN</sub> <sup>1</sup> (V)	Package Dimensions (inches) <sup>2</sup>
<b>SINGLE</b>						
ASA2805S	5962-94629	5	+5	1	16-40	1.075 x 1.075 x 0.27
ASA2812S	5962-94631	5	+12	0.417	16-40	1.075 x 1.075 x 0.27
ASA2815S	5962-94630	5	+15	0.333	16-40	1.075 x 1.075 x 0.27
AHF2805S	5962-91600	12	+5	2.4	16-40	1.45 x 1.12 x 0.33
AHF2812S	5962-94568	12	+12	1	16-40	1.45 x 1.12 x 0.33
AHF2815S	5962-94563	12	+15	0.8	16-40	1.45 x 1.12 x 0.33
AHV2805S	5962-91773	15	+5	3	16-40	2.12 x 1.12 x 0.405
AHV2812S	5962-92112	15	+12	1.25	16-40	2.12 x 1.12 x 0.405
AHV2815S	5962-92113	15	+15	1	16-40	2.12 x 1.12 x 0.405
AHE2805S	5962-89683	20	+5	3	17-40	2.12 x 1.12 x 0.495
AHE2812S	5962-91580	20	+12	1.667	17-40	2.12 x 1.12 x 0.495
AHE2815S	5962-91625	20	+15	1.333	17-40	2.12 x 1.12 x 0.495
ATR2805S	5962-94624	30	+5	6	16-40	2.12 x 1.12 x 0.405
ATR2812S	5962-94625	30	+12	2.5	16-40	2.12 x 1.12 x 0.405
ATR2815S	5962-94626	30	+15	2	16-40	2.12 x 1.12 x 0.405
ATW2805S	5962-91579	30	+5	6	19-40	1.95 x 1.35 x 0.5
ATW2812S	5962-92110	30	+12	2.5	18-40	1.95 x 1.35 x 0.5
ATW2815S	5962-91599	30	+15	2	18-40	1.95 x 1.35 x 0.5
AFL2803R3S	5962-99552	66	+3.3	20	16-40	2.5 x 1.5 x 0.38
AFL2805S	5962-94721	80	+5	16	16-40	2.5 x 1.5 x 0.38
AFL2808S	5962-96659	80	+8	10	16-40	2.5 x 1.5 x 0.38
AFL2812S	5962-94722	108	+12	9	16-40	2.5 x 1.5 x 0.38
AFL2815S	5962-94723	120	+15	8	16-40	2.5 x 1.5 x 0.38
AFL2828S	5962-96899	112	+28	4	16-40	2.5 x 1.5 x 0.38
AFL5003R3S	5962-02556	66	+3.3	20	30-80	2.5 x 1.5 x 0.38
AFL5005S	5962-02557	80	+5	16	30-80	2.5 x 1.5 x 0.38
AFL5008S	5962-02558	80	+8	10	30-80	2.5 x 1.5 x 0.38
AFL5009S	5962-02559	90	+9	10	30-80	2.5 x 1.5 x 0.38
AFL5012S	5962-02560	108	+12	9	30-80	2.5 x 1.5 x 0.38
AFL5028S	5962-02562	112	+28	4	30-80	2.5 x 1.5 x 0.38
AFL5015S	5962-02561	120	+15	8	30-80	2.5 x 1.5 x 0.38
AFL12003R3S	5962-02548	66	+3.3	20	80-160	2.5 x 1.5 x 0.38
AFL12005S	5962-99608	80	+5	16	80-160	2.5 x 1.5 x 0.38
AFL12008S	5962-02549	80	+8	10	80-160	2.5 x 1.5 x 0.38
AFL12009S	5962-02550	90	+9	10	80-160	2.5 x 1.5 x 0.38
AFL12012S	5962-02551	108	+12	9	80-160	2.5 x 1.5 x 0.38
AFL12028S	5962-99608	112	+28	4	80-160	2.5 x 1.5 x 0.38
AFL12015S	5962-02552	120	+15	8	80-160	2.5 x 1.5 x 0.38

## Standard DC-DC Converters, continued

Part Number	DSCC SMD Part Number	P <sub>OUT</sub> (W)	V <sub>OUT</sub> (V)	I <sub>OUT</sub> (A)	V <sub>IN</sub> <sup>1</sup> (V)	Package Dimensions (inches) <sup>2</sup>
AFL27003R3S	5962-99553	66	+3.3	20	160-400	2.5 x 1.5 x 0.38
AFL27005S	5962-94569	80	+5	16	160-400	2.5 x 1.5 x 0.38
AFL27006S	5962-95534	80	+6	13.5	160-400	2.5 x 1.5 x 0.38
AFL27009S	5962-95535	90	+9	10	160-400	2.5 x 1.5 x 0.38
AFL27012S	5962-94753	108	+12	9	160-400	2.5 x 1.5 x 0.38
AFL27028S	5962-95565	112	+28	4	160-400	2.5 x 1.5 x 0.38
AFL27015S	5962-94570	120	+15	8	160-400	2.5 x 1.5 x 0.38
<b>DUAL</b>						
ASA2812D	5962-95648	5	±12	±0.208	16-40	1.075 x 1.075 x 0.27
ASA2815D	5962-94649	5	±15	±0.167	16-40	1.075 x 1.075 x 0.27
AHF2812D	5962-92111	12	±12	±0.5	16-40	1.45 x 1.12 x 0.33
AHF2815D	5962-92351	12	±15	±0.4	16-40	1.45 x 1.12 x 0.33
AHE2812D	5962-92040	15	±12	±0.625	17-40	2.12 x 1.12 x 0.495
AHV2812D	5962-92114	15	±12	±0.625	16-40	2.12 x 1.12 x 0.405
AHE2815D	5962-91575	15	±15	±0.5	17-40	2.12 x 1.12 x 0.495
AHV2815D	5962-91774	15	±15	±0.5	16-40	2.12 x 1.12 x 0.405
ATR2812D	5962-94627	30	±12	±1.25	16-40	2.12 x 1.12 x 0.405
ATW2812D	5962-92109	30	±12	±1.25	18-40	1.95 x 1.35 x 0.5
ATR2815D	5962-94628	30	±15	±1	16-40	2.12 x 1.12 x 0.405
ATW2815D	5962-91613	30	±15	±1	18-40	1.95 x 1.35 x 0.5
AFL2805D	5962-95795	80	±5	±8	16-40	2.5 x 1.5 x 0.38
AFL2812D	5962-95796	96	±12	±4.5	16-40	2.5 x 1.5 x 0.38
AFL2815D	5962-94724	100	±15	±3.3	16-40	2.5 x 1.5 x 0.38
AFL5005D	5962-02563	80	±5	±8	30-70	2.5 x 1.5 x 0.38
AFL5012D	5962-02564	96	±12	±4.5	30-70	2.5 x 1.5 x 0.38
AFL5015D	5962-02565	100	±15	±3.3	30-70	2.5 x 1.5 x 0.38
AFL12005D	5962-02554	80	±5	±8	80-160	2.5 x 1.5 x 0.38
AFL12012D	5962-99609	90	±12	±4.5	80-160	2.5 x 1.5 x 0.38
AFL12015D	5962-02555	100	±15	±3.3	80-160	2.5 x 1.5 x 0.38
AFL27005D	5962-95501	80	±5	±8	160-400	2.5 x 1.5 x 0.38
AFL27012D	5962-99518	96	±12	±4.5	160-400	2.5 x 1.5 x 0.38
AFL27015D	5962-95532	100	±15	±3.3	160-400	2.5 x 1.5 x 0.38
<b>TRIPLE</b>						
AHF2815T	5962-94623	8	+5, ±15	1, ±0.1	16-40	1.45 x 1.12 x 0.33
AHV2812T	5962-92115	15	+5, ±12	2, ±0.208	16-40	2.12 x 1.12 x 0.405
AHV2815T	5962-92116	15	+5, ±12	2, ±0.167	16-40	2.12 x 1.12 x 0.405
ATO2812T	5962-91602	15	+5, ±12	2, ±0.208	16-40	1.95 x 1.35 x 0.5
ATO2815T	5962-90954	15	+5, ±12	2, ±0.167	16-40	1.95 x 1.35 x 0.5
ATR2812T	5962-93158	30	+5, ±12	3, ±0.625	16-40	2.12 x 1.12 x 0.405
ATR2815T	5962-92159	30	+5, ±15	3, ±0.5	16-40	2.12 x 1.12 x 0.405

Note 1: Consult Factory for other input voltages.

Note 2: Dimensions exclude mounting tabs and input/output pins. Please refer to data sheets for detailed case outline information.

## DC-DC CONVERTER NOMENCLATURE

### SPACE DEVICE TYPE

AMR — Rad Tolerant  
 AMA — Rad Tolerant  
 AMF — Rad Tolerant  
 ARH — Rad Hard  
 ART — Rad Hard  
 ARP — Rad Hard  
 M3G — Rad Hard  
 M3L — Rad Tolerant  
 M3H — Rad Tolerant  
 S — Rad Tolerant  
 Z — Rad Tolerant

### INPUT VOLTAGE

28 — 28V  
 50 — 50V  
 70 — 70V  
 120 — 120V  
 270 — 270V

### OUTPUT VOLTAGE

05 — 5.0V 01R5 — 1.5V  
 12 — 12V 02R5 — 2.5V  
 15 — 15V 03R3 — 3.3V  
 05R2 — 5.2V

**ARH 28 3R3 S /EM**

### SCREENING LEVEL

Blank — Processed to Class K  
 EM — Engineering Models  
 P — Prototype Models

### NUMBER OF OUTPUT

S — Single  
 D — Dual  
 T — Triple

### STANDARD DEVICE TYPE

AFL — 80-120W  
 ATR — 30W  
 AHF — 12W  
 AHE — 15W  
 AHV — 15W  
 ATW — 30W  
 ATO — 15W  
 ASA — 5W

### INPUT VOLTAGE

28 — 28V  
 50 — 50V  
 70 — 70V  
 120 — 120V  
 270 — 270V

### OUTPUT VOLTAGE

05 — 5.0V 02R5 — 2.5V  
 12 — 12V 03R3 — 3.3V  
 15 — 15V 05R2 — 5.2V

**AFL 120 12 S X /CH**

### SCREENING LEVEL

Blank — Minimum Screening  
 ES — Environmental Screening  
 HB — Class H equivalent,  
 no element evaluation  
 CH — Class H

### CASE STYLE

(Consult Data Sheet for Description)  
 Blank Y  
 W Z  
 X F = Flange

### NUMBER OF OUTPUT

S — Single  
 D — Dual  
 T — Triple

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