



# 500URD

## DC/DC Converter

### FEATURES

- Up to 80% Efficiency
- Single & Dual Output, 5-6 watt converter
- Available in 24 and 48 VDC Inputs 4 - 1 *Input Range*
- Industry Standard Pinout

### OUTPUT SPECS.

PARAMETER	CONDITIONS	LIMITS
TOTAL OUTPUT POWER		5 TO 6 WATTS
VOLTAGE & CURRENT		SEE TABLE
LINE REGULATION		
SINGLE OUTPUT	(MIN. TO MAX. LINE @ MAX. LOAD)	±0.5%
DUAL OUTPUT	(MIN. TO MAX. LINE @ MAX. LOAD)	±0.5%
LOAD REGULATION		
SINGLE OUTPUT	(MAX. TO 10% LOAD @ NOM. LINE)	±0.5%
DUAL OUTPUT	(MAX. TO 25% LOAD @ NOM. LINE, EQUAL LOADS)	±1%
OUTPUT VOLTAGE BALANCE (DUAL)	(EQUAL LOADS)	±1.0% MAX.
OUTPUT VOLTAGE SETTING ACCURACY		±2%
TEMPERATURE COEFFICIENT		±.05%/°C
RIPPLE/NOISE	FOR 3V/5V=75 MV P-P; FOR 12V/15V=1% P-P MAX.	
SHORT CIRCUIT PROTECTION		CONTINUOUS, AUTOMATIC RECOVERY





GENERAL SPECS.

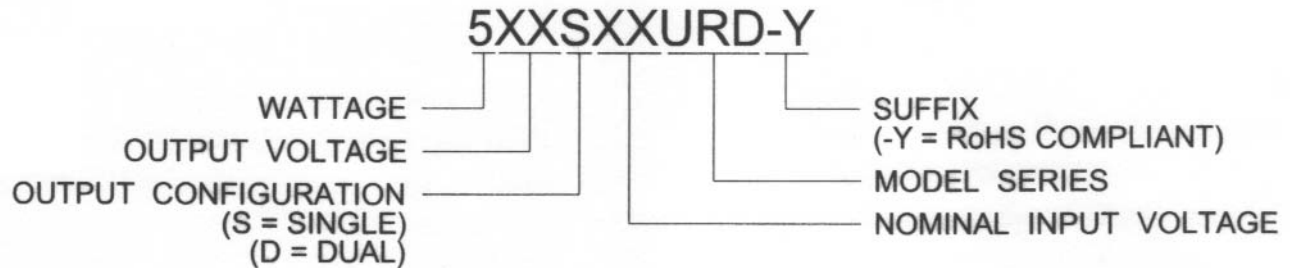
<u>PARAMETER</u>	<u>CONDITIONS</u>	<u>LIMITS</u>
ISOLATION RESISTANCE		10 GOHMS MIN.
ISOLATION VOLTAGE		1500VDC MIN.
EFFICIENCY		SEE TABLE
SWITCHING FREQUENCY		200KHZ MIN.
SIZE		1.25" X 0.80" X 0.40"
CASE MATERIAL		NON-CONDUCTIVE BLACK PLASTIC
WEIGHT		0.5 OZ.

ENVIRONMENTAL SPECS.

<u>PARAMETER</u>	<u>CONDITIONS</u>	<u>LIMITS</u>
OPERATING TEMPERATURE (AMBIENT)		-40°C TO +71°C
MAX. CASE TEMPERATURE		+95°C
MATERIAL FLAMMABILITY		UL94V-0
RELATIVE HUMIDITY		UP TO 95%, NON-CONDENSING



## PART NUMBER STRUCTURE



## SPECIFICATION TABLE

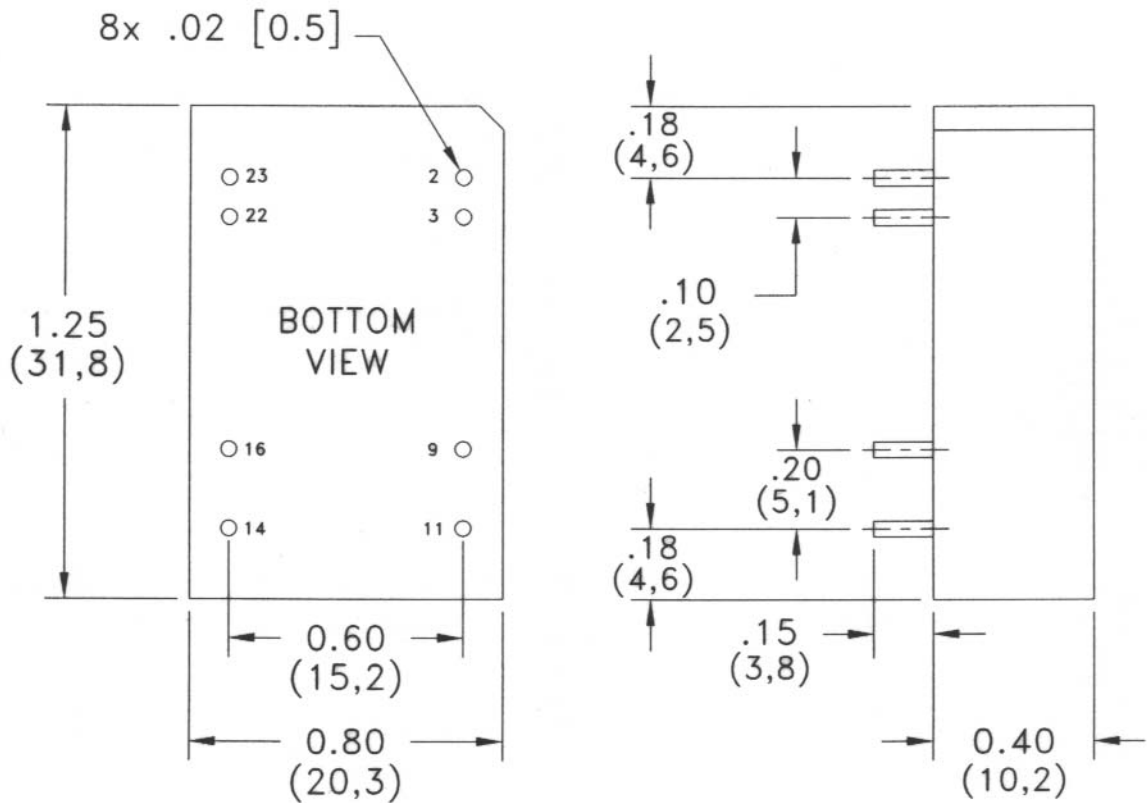
MARTEK MODEL NUMBER	NOMINAL INPUT VOLTAGE (VDC)	INPUT VOLTAGE RANGE (VDC)	INPUT CURRENT		OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (mA)	% EFF. @ F.L. TYP.
			NO LOAD mA TYP.	FULL LOAD mA TYP.			
505S24URD	24	9-36	9	267	5	1000	78
512S24URD	24	9-36	9	294	12	470	80
515S24URD	24	9-36	9	313	15	400	80
505S48URD	48	18-72	5	134	5	1000	78
512S48URD	48	18-72	5	147	12	470	80
515S48URD	48	18-72	5	157	15	400	80
505D24URD	24	9-36	18	267	±5	±500	78
512D24URD	24	9-36	18	288	±12	±230	80
515D24URD	24	9-36	18	297	±15	±190	80
505D48URD	48	18-72	8	134	±5	±500	78
512D48URD	48	18-72	8	144	±12	±230	80
515D48URD	48	18-72	8	149	±15	±190	80
505S24URD-Y	24	9-36	9	267	5	1000	78
512S24URD-Y	24	9-36	9	294	12	470	80
515S24URD-Y	24	9-36	9	313	15	400	80
505S48URD-Y	48	18-72	5	134	5	1000	78
512S48URD-Y	48	18-72	5	147	12	470	80
515S48URD-Y	48	18-72	5	157	15	400	80
505D24URD-Y	24	9-36	18	267	±5	±500	78
512D24URD-Y	24	9-36	18	288	±12	±230	80
515D24URD-Y	24	9-36	18	297	±15	±190	80
505D48URD-Y	48	18-72	8	134	±5	±500	78
512D48URD-Y	48	18-72	8	144	±12	±230	80
515D48URD-Y	48	18-72	8	149	±15	±190	80

NOTE: ALL RoHS COMPLIANT PRODUCTS ARE DESIGNATED BY "-Y" SUFFIX.





### MECHANICAL SPECIFICATIONS



PIN CONNECTIONS		
PIN NO.	SINGLE	DUAL
2,3	-V In	-V In
9	N/C	COMMON
11	N/C	-V Out
14	+V Out	+V Out
16	-V Out	COMMON
22,23	+V In	+V In

NOTES:

3. PIN TOLERANCE: .XXX = ±.002 [±.05].

