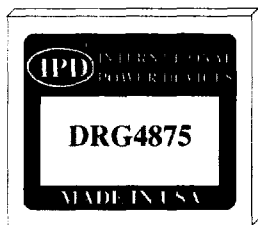




DRG Series of Telephone Ring Generators



THE DRG SERIES ARE DC TO AC CONVERTERS INTENDED TO BE USED AS TELEPHONE RING GENERATORS. THE DRG SERIES EMPLOYS A SWITCHING CONVERTER CAPABLE OF PRODUCING 30 VA OF OUTPUT POWER AT AN EFFICIENCY IN EXCESS OF 80%. ALL MODELS WITHIN THIS FAMILY ARE DESIGNED TO OPERATE FROM A -48VDC SOURCE. THREE DIFFERENT OUTPUT VOLTAGE OPTIONS ARE AVAILABLE. EACH MODEL HAS USER SELECTABLE OUTPUT FREQUENCIES OF 16.5, 20, 25 AND 30 HZ.



DIMENSIONS:
3.937" x 3.937" x 0.70"
(100.0) x (100.0) x (17.78)mm

Signal Definitions:

-Vin = Negative Connection for -48VDC Input.
-Vin_RTN = Return (Positive) Connection for -48VDC Input.
FG = Case Ground (Frame Ground).
Remote = Remote ON/OFF. Connecting to -Vin will turn unit off. Floating will turn it on.
V_o = Ring Generator Output.
Com = Common (Ground) Connection for AC Output and for the Frequency Select Inputs.
FREQ1 = Frequency Select Logic Inputs.
FREQ2 = Frequency Select Logic Inputs.
N/C = No Connection.

Frequency Programming:

FREQ1	=	0	1	0	1
FREQ2	=	0	0	1	1
FREQ Out	=	20Hz	25Hz	30Hz	16.5Hz

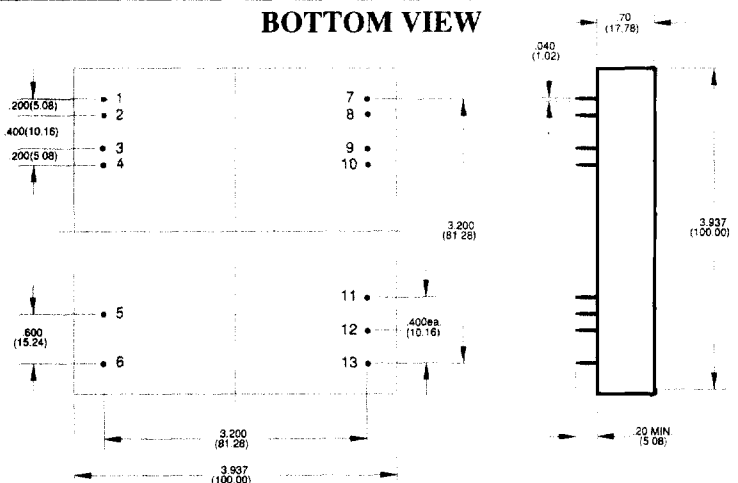
FEATURES / OPTIONS

- -48 VDC Nominal Input Voltage
- 80% Minimum Efficiency
- Digital Output Frequency Programming
- Crystal Oscillator Time Base
- Sine Wave Output
- Low THD
- Customer Specified Output Voltages
- Customer Specified Output Frequencies
- DC Offset Directly on Output
- Regulatory Agency Approvals

MODEL SELECTION

MODEL	NOMINAL V _{out}	OUTPUT POWER
DRG4865	65Vrms	30 VA
DRG4875	75Vrms	30 VA
DRG4885	85Vrms	30 VA

BOTTOM VIEW



Pin #	Function	Pin #	Function
1	+Vin	7	V _{out}
2	+Vin	8	V _{out}
3	-Vin	9	Common
4	-Vin	10	Common
5	FG	11	Freq 1
6	Remote	12	Freq 2
		13	No Connect

All Dimensions are in inches (MM) Mechanical tolerances are ± 0.040"





DRG Series of Telephone Ring Generators



PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS	NOTES:
DC INPUT SPECIFICATIONS:						
Input Voltage Range	-36	-48	-72	VDC		
Input/Output Isolation	500			VDC		
RING TIME BASE INPUT SPECIFICATIONS:						
Clock Frequency						
20 Hz Operation	19.5	20.0	20.5	Hz		
25 Hz Operation	24.5	25.0	25.5	Hz		
30 Hz Operation	29.5	30.0	30.5	Hz		
16.5 Hz Operation	16.0	16.5	17.0	Hz		
Frequency Select Low			0.7	VDC	FREQ1 & FREQ2	
Frequency Select High	3.5		5.0	VDC	FREQ1 & FREQ2	
RING GENERATOR OUTPUT:						
AC Output Voltage						
DRG4865	61	65	69	Vrms		
DRG4875	71	75	79	Vrms		
DRG4885	81	85	89	Vrms		
AC Output Current						
DRG4865	0		465	mArms		
DRG4875	0		400	mArms		
DRG4885	0		355	mArms		
Load Power Factor						
Crest Factor		1.5	1.6		30 VA, PF=1.0	
THD			5	%	30 VA, PF=1.0	
Short Circuit Protection						
					Continuous With Auto Restart	
THERMAL:						
Efficiency 1	80			%	48Vin, 30VA	
Operating Temperature	-20		+100	°C	Case Temperature	
Storage Temperature	-40		+125	°C	Ambient Temp.	
PHYSICAL:						
Dimensions					4.0 x 4.0 x 0.7 In	
Case Material					Six-Side Shielded Nickel-Plated Copper	

* All specifications typical at +25°C Nominal Line and Full Load unless otherwise noted.

* Specifications subject to change without notice.

* When measuring the output ripple it is recommended to place a 10 µF tantalum capacitor across each output.



INTERNATIONAL POWER DEVICES, INC.

20 Linden Street, Boston, MA 02134 • Phone: 617-782-3331 • Fax: 617-782-7416

