

# Specification of 1850~1915MHz 6W Amplifier

Model Name : RCA1880H8FL

Parameter	Specification	
Frequency Range	1850 ~ 1915 MHz	
CDMA Average Power (12FA )	38dBm / 12FA (20MHz)	
Input Level	-16dBm / 12FA (20MHz)	
Gain	54 dB $\pm$ 0.5 dB	
Ripple	1.5 dB <sub>p-p</sub> (@ BW = 65MHz) , 1.0 dB <sub>p-p</sub> (@ A Band = 15MHz)	
Spurious Emission @ CDMA 12FA(-20°C to +70°C)	$\pm$ 885kHz @ RBW=30kHz, VBW=100Hz	-38dBc
	$\pm$ 1.98MHz @ RBW=30kHz, VBW=100Hz	-44dBc
Gain variation over temperature	$\pm$ 1 dB ( Reference : Ambient Temp. 25°C)	
Noise Figure	5dB max.	
Return loss (Input/Output)	1.5 : 1 [Max.]	
DC Operating voltages	+27 [V]	
DC current	4.0[A] Max @ 38dBm	
Forward Power Detector	Range : 22dBm ~ 42dBm	
Enable Disable Signal Input	0 Volt : On, 5 Volt or Open : Off	
Operating temperature	-20°C to +70°C (Ambient Temp.)	
Operating Humidity	5% ~ 95%	
Size (mm)	125*90*22 mm	
RF I/O Connector	SMA Female	

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15Pin D-sub Description

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Pin	Parameter	Description	Specification
1	+27V	+27V	
2			
3			
4			
5			
6	GND	GND	
7			
8			
9			
10			
11	HPA PWR MON	Forward Power Monitor {4.0V±0.05V@38dBm(0.1V/dBm)}	
12	Over PWR ALM	Over Power Alarm(@42dBm±0.5dB)	High Alarm
13	HPA Enable	En/Disable Signal Input (Active Low)	Low Enable
14	VSWR ALM	Alarm: 6 ~ 8dB @ Reflected power > 32dBm ±1dBm • Return Loss 6dB 이하에서 alarm 발생조건이 되며, return loss 8dB 이상이면 No alarm[TBD]	High Alarm
15	Over Temp. ALM	Over Temperature Alarm (@85±5℃)	High Alarm