

Product Specification

GSM1805-1880-32 GSM Power Amplifier 1805-1880 MHz 32 Watts

Functions

Number	Description
1	ALC Point Control and Read
2	ALC on/Off Control and Read
3	PA Mute On/Off Control and Read
4	Digital Attenuator Control
5	Operating Temperature Monitor and Alarm
6	Output Power Monitor
7	Reverse Power Monitor and Alarm
8	DC Current Monitor and Alarm
9	Protected Against High Reflected Power

Environmental Specifications

Parameter	Specification
Max Base Plate Operating Temp.	0° to +85° C Shutdown @ 90° C
Relative Humidity	5% ~ 96 %
Atmospheric Pressure	70 kPa ~ 106 kPa
Cooling	Not provided, User Supplied

Electrical Specifications

Parameter	Specification
Frequency	1805 – 1880 MHz
Signal Type	GSM, PAR 0 dB@ 0.01%
Nominal Output Power	32 W
Nominal Gain	33 dB
Gain w/ ALC off +/- 1db	33 ± 1dB (Room Temperature/ Value of attenuator 8.5 dB) 33 ± 1.5 dB (Low and High Temperature/ Value of attenuator 8.5 dB)
Input Return Loss	18 dB
Output Return Loss	18 dB
Tx ALC control range vs. Tx input level change, Min	16 dB (Nominal Input +/- 8 dB)
ALC Set Range	16 dB [45 ~ 30 dBm]
ALC Set Step	0.5 dB
ALC Control Accuracy	± 1dB
Attenuator Set Range [ALC Off]	31 dB
Attenuator Set Step [ALC Off]	0.25 dB
Max Input Level, No Damage and Degradation	+15 dBm
DC Power	+28V
Efficiency	≥ 35% @ 32 W
Output Load Mismatch Tolerance	Isolator Protected
Power Consumption when Muted	< 5 W
Forward Power Monitor	Range: 30 dB, 48 dBm ~ 19 dBm Resolution: 0.1 dBm Accuracy: ± 2 dB
Reverse Power Monitor	Range: 30 dB, 48 dBm ~ 19 dBm Resolution: 0.1 dBm Accuracy: ± 2 dB
DC Current Monitor	Range: 0 - 15 A Resolution: 0.1 A Accuracy: ± 5%
Temperature Monitor	Range: -40° C ~ +105° C Resolution: 1° C Accuracy: ±3° C
RF Connectors	SMA Female

Power Connector	M3 Screw Terminal
Control Connector	4 Position 2.5 mm Pitch Header Mates With JST XHP-4
Dimensions	See Attached Drawing (Dimensions are in mm)

Control Pins

Pin Number	Description
1	GND
2	RS484_A
3	RS485_B
4	NC

Outline Drawing

