



SS300T6000M25A | 300~6000MHz, 25/10W

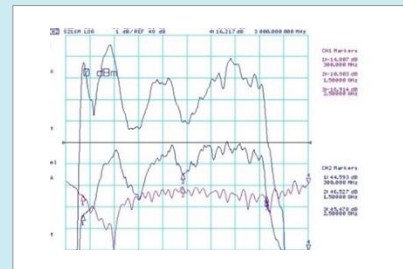
Amplifier General Description

This high power amplifier system covers the frequency range from 300 to 2500MHz and from 2500 to 6000MHz at each frequency band selection. This utilizes GaN devices that provide high gain and excellent output power performance. With exceptional performance, long term reliability and high efficiency are available by using this application.



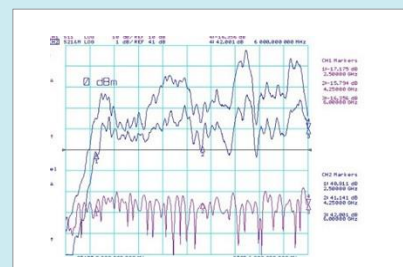
ELECTRICAL SPECIFICATIONS @ 220VAC, 25°C, 50Ω System

| Parameter | Symbol | Specifications | Unit |
|--|-----------|---------------------------|------|
| Operating Frequency | BW | 300 ~ 2500 2500 ~ 6000 | MHz |
| Power Output CW | P_{SAT} | 25/10 Min. | Watt |
| Power Gain @ CW | G1dB | 46/42 Min. | dB |
| Input Power Range | P_{IN} | 0 Typ. | dBm |
| Gain Adjustment Range | VVA | 25 Typ. | dB |
| Input Return Loss | S_{11} | -10 Typ. | dB |
| Noise Figure @ maximum gain | NF | -10 Typ. | dB |
| Third Order Intermodulation 2-Tone @ 30dBm/Tone, 1MHz Spacing | IM3 | -10 Typ. | dBc |
| Harmonics @ P_{OUT} (without Harmonic Suppression Filters) | 2ND | -20 Max. | dBc |
| | 3RD | -20 Max. | |
| Spurious Signals | Spur | -70 Max. | dBc |
| Operating Voltage –(1-phase) | VAC | 210 ~ 230 | Volt |
| Power Consumption @ 25/10WCW | PD | 250 | Watt |



Low Band @ P_{SAT}

Top Curve: Small Signal Gain @ $P_{IN} = -20$ dBm
Middle Curve: Power Gain @ P_{SAT} , $P_{IN} = 0$ dBm Reference = 48dB, Scale = 1dB/div
Bottom Curve: Input VSWR Reference = 10dB, Scale = 10dB/Div



High Band @ P_{SAT}

Top Curve: Small Signal Gain @ $P_{IN} = -20$ dBm
Middle Curve: Power Gain @ P_{SAT} , $P_{IN} = 0$ dBm Reference = 41dB, Scale = 1dB/div
Bottom Curve: Input VSWR Reference = 10dB, Scale = 10dB/Div