

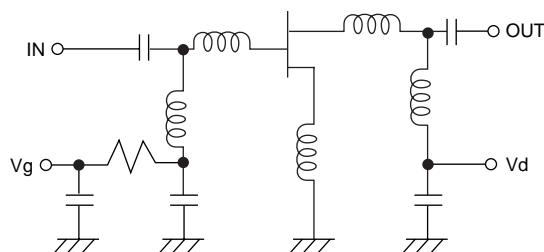
**SANYO****SPM2001A**

## GaAs MMIC For 1.9GHz PHS Transmitting Amplifier

### Features and Applications

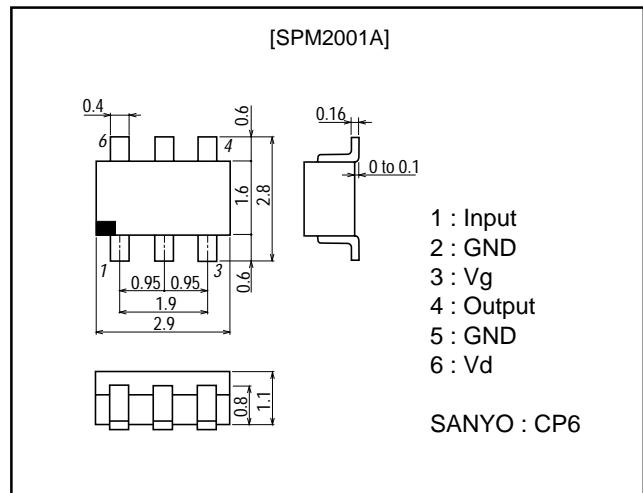
- Best suited for a driver stage of PHS transmitting amplifier.
- Power supply voltage :  $\pm 3\text{V}$ , high linearity.
- Plastic mold package CP6 applicable to surface mounting and automatic inserting.

### Equivalent Circuit



### Package Dimensions

unit : mm  
1299



### Specifications

#### Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

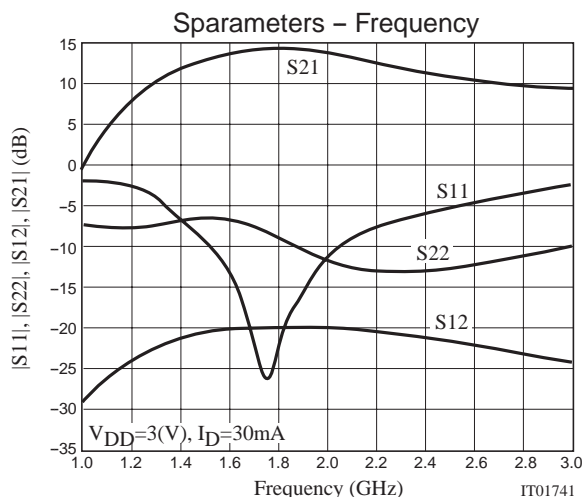
Parameter	Symbol	Ratings	Unit
Power Supply Voltage	$V_{DD}$	5.0	V
Gate Voltage	$V_G$	-3.0	V
Maximum Power Dissipation	$P_D$	0.25	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-30 to +90	$^\circ\text{C}$

#### Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	min	typ	max	Unit
Drain Current	$I_{DSS}$	$V_{DD}=3\text{V}$ , $V_G=0\text{V}$	40	55	70	mA
Output Power at 1dB Gain Compression	$P_{o1dB}$	$V_{DD}=3\text{V}$ , $I_D=30\text{mA}$ , $f=1.9\text{GHz}$		14		dBm
Small Signal Gain	$G_L$	$V_{DD}=3\text{V}$ , $I_D=30\text{mA}$ , $f=1.9\text{GHz}$		13		dB
VSWR(input)		$V_{DD}=3\text{V}$ , $f=1.9\text{GHz}$		2.5		-
VSWR(output)		$V_{DD}=3\text{V}$ , $f=1.9\text{GHz}$		2.0		-

Marking : MF

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