

TPA6211T Q1 Automotive 3.1 W Mono Analog Input Class AB Audio Amplifier



Images are for reference only

[Inquiry](#)

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: HVSSOP-8

Product Type: Amplifier ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

General Description

The TPA6211T-Q1 device is a 3.1-W mono fully-differential amplifier designed to drive a speaker with at least 3- impedance while consuming only 20 mm² total printed-circuit board (PCB) area in most applications. The device operates from 2.5 V to 5.5 V, drawing only 4 mA of quiescent supply current. The TPA6211T-Q1 device is available in the space-saving 8-pin HVSSOP package.

The device includes features such as a 80 dB supply voltage rejection ratio from 20 Hz to 2 kHz, improved RF rectification immunity, small PCB area, and a fast start-up with minimal pop makes the TPA6211T-Q1 device ideal for emergency call applications. Additionally, the device supports low-power needs in infotainment and cluster applications, such as cluster chimes or driver notification.

Key Features

AEC-Q100 Qualified for automotive applications
Device Temperature Grade 2: -40°C to 105°C

Device HBM ESD classification level 3A

Device CDM ESD classification level C6

3.1 W into 3 from a 5-V supply at THD = 10% (typical)

Low supply current: 4 mA (typical) at 5 V

Shutdown current: 0.01 μA (typical)

Fast startup with minimal pop

Only three external components
Improved PSRR (80 dB) and wide supply voltage (2.5 V to 5.5 V) for direct battery operation

Fully differential design reduces RF rectification

63 dB CMRR Eliminates two input coupling capacitors

Recommended For You

TPA3125D2N

Texas Instruments, Inc
DIP20

TPA6111A2DR

Texas Instruments, Inc
SOP8

TPA2012D2RTJR

Texas Instruments, Inc
QFN20

TPA6132A2RTER

Texas Instruments, Inc
QFN

TPA2013D1RGPR

Texas Instruments, Inc
QFN20

TPA2010D1YZFR

Texas Instruments, Inc
DSBGA9

TPA3118D2QDAPRQ1

Texas Instruments, Inc
HTSSOP-32

TPA6211A1TDGNRQ1

Texas Instruments, Inc
MSOP8

TAS5414CTPHDRQ1

Texas Instruments, Inc
HTQFP-64

PCMI681TPWPRQ1

Texas Instruments, Inc
HTSSOP28

TPA3131D2RHBR

Texas Instruments, Inc
VQFN32

TPA3100D2PHP

Texas Instruments, Inc
QFP

TPA3244DDWR

Texas Instruments, Inc
HTSSOP-44

TPA6017A2PWP

Texas Instruments, Inc
HTSSOP20

TPA4861D

Texas Instruments, Inc
SOP8