ACE12008A

N&P Pair Enhancement Mode MOSFET

Description

The ACE12008A is the N&P Channel enhancement mode power field effect transistors are produced using high cell density, DMOS trench technology. This high-density process is especially tailored to minimize on-state resistance and provide superior switching performance. These devices are particularly suited for low voltage applications such as notebook computer power management and other battery powered circuits where high-side switching, low in-line power loss, and resistance to transients are needed.

Features

- N-Channel
  20V/0.65A, $R_{DS(ON)}$=380mΩ@VGS=4.5V
  20V/0.55A, $R_{DS(ON)}$=450mΩ@VGS=2.5V
  20V/0.45A, $R_{DS(ON)}$=800mΩ@VGS=1.8V
- P-Channel
  -20V/0.45A, $R_{DS(ON)}$= 520mΩ @VGS=-4.5V
  -20V/0.35A, $R_{DS(ON)}$= 700mΩ @VGS=-2.5V
  -20V/0.25A, $R_{DS(ON)}$= 1500mΩ @VGS=-1.8V
- Super high-density cell design for extremely low $R_{DS\ (ON)}$
- Exceptional on-resistance and maximum DC current capability

Application

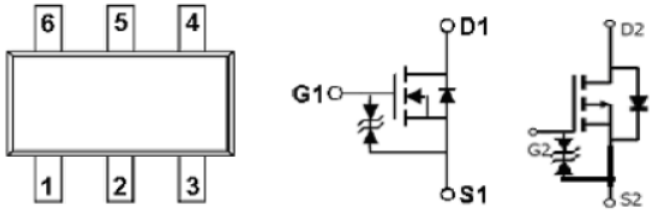
- Power Management in Note book
- Portable Equipment
- Battery Powered System
- DC/DC Converter
- Load Switch
- DSC
- LCD Display inverter

Absolute Maximum Ratings (T_A=25℃ Unless otherwise noted)

Parameter		Symbol	Typical		Unit
			N-Channel	P-Channel	
Drain-Source Voltage		V_{DSS}	20	-20	V
Gate-Source Voltage		V_{GS}	±12	±12	V
Continuous Drain Current (T_J=150℃)	T_A=25℃	I_D	0.65	-0.45	A
	T_A=80℃		0.45	-0.35	
Pulsed Drain Current[1)]		I_{DM}	1.0	-1.0	A
Continuous Source Current (Diode Conduction)		I_S	0.3	-0.3	
Power Dissipation	T_A=25℃	P_D	0.35		W
	T_A=70℃		0.19		
Operating Junction Temperature		T_J	-55 to 150		°C
Storage Temperature Range		T_{STG}	-55 to 150		°C

Packaging Type

SOT-563



Ordering information

ACE12008A XX + H

- Halogen-free
- Pb - free
- KG：SOT-563

Notes

ACE does not assume any responsibility for use as critical components in life support devices or systems without the express written approval of the president and general counsel of ACE Technology Co., LTD. As sued herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and shoes failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury to the user.
2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.