ACE16802B

N-Channel Enhancement Mode Power MOSFET

Description

- Synchronous rectification
- Primary side switch
- DC/DC converters
- Power supplies

Features

- V_{DS}=80V
- I_D=110A
- $R_{DS(ON)1}$@V_{GS}=10V, TYP 2.7mΩ

Absolute Maximum Ratings @T_A=25°C unless otherwise noted

Parameter		Symbol	Max	Unit
Drain-Source Voltage		V_{DSS}	80	V
Gate-Source Voltage		V_{GSS}	±20	V
Drain Current (Continuous)*AC	T_C=25℃	I_D	100	A
	T_C=70℃		89	
Drain Current (Pulsed)*B		I_{DM}	200	A
Power Dissipation	T_C=25℃	P_D	100	W
Operating temperature / storage temperature		T_J/T_{STG}	-55~150	°C

A: The value of $R_{\theta JA}$ is measured with the device mounted on 1in^2 FR-4 board with 2oz. Copper, in a still air environment with T_A=25°C. The value in any given application depends on the user's specific board design.

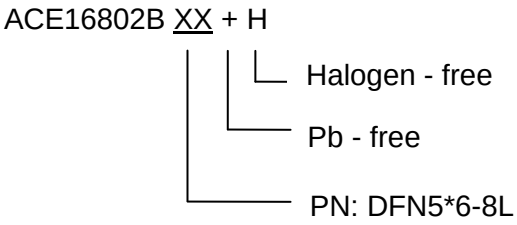
B: Repetitive rating, pulse width limited by junction temperature.

C: The current rating is based on the t≤ 10s junction to ambient thermal resistance rating, Package limited 100A.

Thermal Resistance Ratings

Parameter		Symbol	Maximum	Unit
Maximum Junction-to-Ambient	t ≤ 10 s	R_{thJA}	23	°C/W
Maximum Junction-to-Case (Drain)	Steady State	R_{thJC}	1.25	

Ordering information



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.