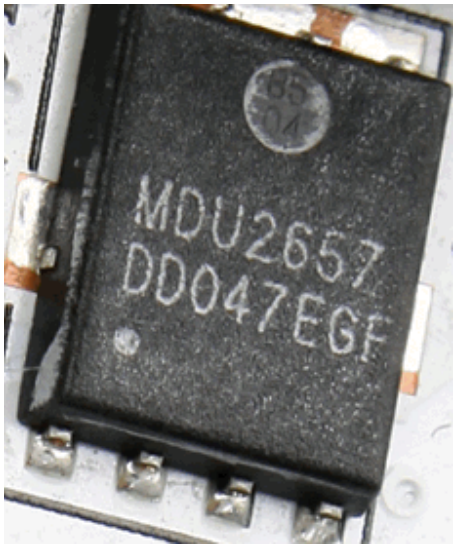
MDU2657



Part Number : MDU2657

Function : Single N-channel Trench MOSFET 30V. 61.7A, 7.5mOhm

Manufacturers : MagnaChip

Description

The device uses advanced Magnachip's MOSFET technology, which provides high performance in on-state resistance, fast switching performance and excellent quality. MDU2657 is suitable device for DC/DC converter and general purpose application.

Features

1. Vds = 30V

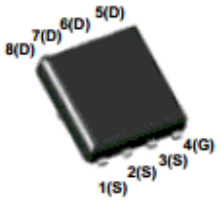
2. Id = 61.7A @ Vgs = 10V

General Description

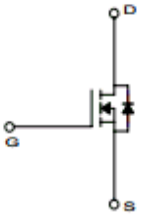
The MDU2657 uses advanced MagnaChip's MOSFET Technology, which provides high performance in on-state resistance, fast switching performance and excellent quality. MDU2657 is suitable device for DC/DC Converter and general purpose applications.

Features

- V_{DS} = 30V
- I_D = 61.7A @V_{GS} = 10V
- $R_{DS(ON)}$
  < 7.5mΩ @V_{GS} = 10V
  < 11.3mΩ @V_{GS} = 4.5V
- 100% UIL Tested
- 100% Rg Tested



PowerDFN56



Absolute Maximum Ratings (Ta = 25°C)

Characteristics		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	30	V
Gate-Source Voltage		V_{GSS}	±20	V
Continuous Drain Current [1]	T_C=25°C	I_D	61.7	A
	T_C=70°C		49.3	
	T_A=25°C		20.4[3]	
	T_A=70°C		16.3[3]	
Pulsed Drain Current		I_{DM}	100	A
Power Dissipation	T_C=25°C	P_D	50	W
	T_C=70°C		32	
	T_A=25°C		5.5[3]	
	T_A=70°C		3.5[3]	
Single Pulse Avalanche Energy [2]		E_{AS}	81	mJ
Junction and Storage Temperature Range		T_J, T_{stg}	-55~150	°C

Thermal Characteristics

Characteristics	Symbol	Rating	Unit
Thermal Resistance, Junction-to-Ambient [1]	$R_{\theta JA}$	22.7	°C/W
Thermal Resistance, Junction-to-Case	$R_{\theta JC}$	2.5	