

N-Channel 100-V (D-S) MOSFET

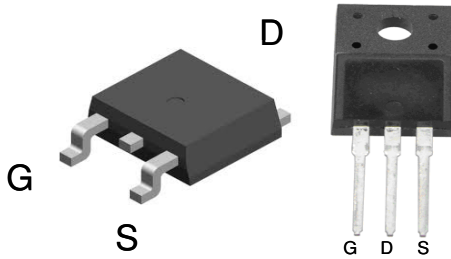
General Description

B15N10D/F combines advanced trench MOSFET technology with a low resistance package to provide extremely low RDS(ON). This device is ideal for boost converters and synchronous rectifiers for consumer, telecom, industrial power supplies and LED backlighting.

Features

- $R_{DS(ON)}=105m\Omega@V_{GS}=10V$
- **High Density Cell Design for Low $R_{DS(ON)}$**
- **Exceptional On-Resistance and Maximum DC Current**
- **TO-252-3/TO-220F-3 Package**

Pin Configuration



Applications

- LED backlight
- LCD monitor
- LCD TV
- DC/DC Converter
- Load Switch

Absolute Maximum Ratings (TA=25°C Unless Otherwise Noted):

Parameter	Symbol	N-Channel	Unit
Drain-Source Voltage	V_{DSS}	100	V
Gate-Source Voltage	V_{GSS}	± 20	V
Continuous Drain Current (tJ=150°C)	I_D	TA=25°C	15
		TA=70°C	14
Pulsed Drain Current	I_{DM}	50	A
Continuous Source Current (Diode Conduction)	I_S	3	A
Maximum Power Dissipation	P_D	TA=25°C	83
		TA=70°C	53
Operating Junction Temperature	T_J	-55 to 150	°C
Thermal Resistance-Junction to Case	$R_{\theta JC}$	1.5	°C/W