Silicon N-Channel Power MOSFET

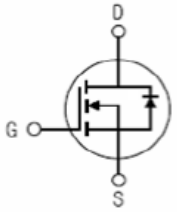
CS4N65F A9R

V_{DSS}	650	V
I_D	4	A
$P_D(T_C=25℃)$	30	W
$R_{DS(ON)Typ}$	2.4	Ω

TO-220F

1. Gate 2. Drain 3. Source

Inner Equivalent Principium Chart



General Description:

CS4N65F A9R, the silicon N-channel Enhanced VDMOSFETs, is obtained by the self-aligned planar Technology which reduce the conduction loss, improve switching performance and enhance the avalanche energy. The transistor can be used in various power switching circuit for system miniaturization and higher efficiency. The package form is TO-220F, which accords with the RoHS standard.

Features:

- **Fast Switching**
- **ESD Improved Capability**
- **Low Gate Charge (Typical Data: 14.5nC)**
- **Low Reverse transfer capacitances(Typical:3.5pF)**
- **100% Single Pulse avalanche energy Test**

Applications:

Power switch circuit of adaptor and charger.

Absolute（Tc= 25℃ unless otherwise specified）:

Symbol	Parameter	Rating	Units
V_{DSS}	Drain-to-Source Voltage	650	V
I_D	Continuous Drain Current	4	A
	Continuous Drain Current T_C = 100 °C	2.5	A
I_{DM} [a1]	Pulsed Drain Current	16	A
V_{GS}	Gate-to-Source Voltage	±30	V
E_{AS} [a2]	Single Pulse Avalanche Energy	200	mJ
dv/dt [a3]	Peak Diode Recovery dv/dt	5.0	V/ns
P_D	Power Dissipation	30	W
	Derating Factor above 25°C	0.24	W/℃
T_J, T_{stg}	Operating Junction and Storage Temperature Range	150，–55 to 150	℃
T_L	Maximum Temperature for Soldering	300	℃