

RJL60S5DPP-E0

600V - 20A - SJ MOS FET
High Speed Power Switching

R07DS0819EJ0100

Rev.1.00

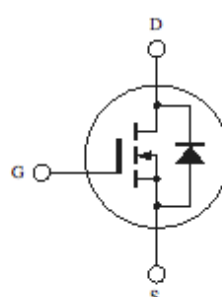
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Features

- Superjunction MOSFET
- Built-in fast recovery diode
- $t_{rr} = 170$ ns typ. (at $I_F = 20$ A, $V_{GS} = 0$, $di_F/dt = 100$ A/μs, $T_a = 25^\circ\text{C}$)
- Low on-resistance
- $R_{DS(on)} = 0.15$ Ω typ. (at $I_D = 10$ A, $V_{GS} = 10$ V, $T_a = 25^\circ\text{C}$)

Outline

RENESAS Package code: PRSS0003AG-A
(Package name: TO-220FP)



1. Gate
2. Drain
3. Source

Absolute Maximum Ratings

($T_a = 25^\circ\text{C}$)

Item		Symbol	Ratings	Unit
Drain to source voltage		V_{DS}	600	V
Gate to source voltage		V_{GS}	+30, □20	V
Drain current	$T_c = 25^\circ\text{C}$	I_D ^{Note 1}	20	A
	$T_c = 100^\circ\text{C}$	I_D ^{Note 1}	12.6	A
Drain peak current		$I_{D(pulse)}$ ^{Note 1}	40	A
Body-drain diode reverse drain current		I_{DR} ^{Note 1}	20	A
Body-drain diode reverse drain peak current		$I_{DR(pulse)}$ ^{Note 1}	40	A
Avalanche current		I_{AP} ^{Note 2}	4	A
Avalanche energy		E_{AR} ^{Note 2}	0.87	mJ
Channel dissipation		P_{ch} ^{Note 3}	33.7	W
Channel to case thermal impedance		□ch-c	3.7	□C/W
Channel temperature		T_{ch}	150	□C
Storage temperature		T_{stg}	-55 to +150	□C

Notes: 1. Limited by T_{ch} max.

2. $ST_{ch} = 25^\circ\text{C}$, $T_{ch} \leq 150^\circ\text{C}$

3. Value at $T_c = 25^\circ\text{C}$