10V Drive Nch MOS FET

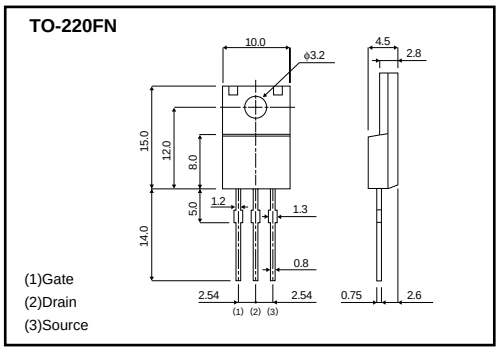
RDN150N20

●Structure
Silicon N-channel
MOS FET

●Features
1) Low on-resistance.
2) Low input capacitance.
3) Exellent resistance to damage from static electricity.

●Application
Switching

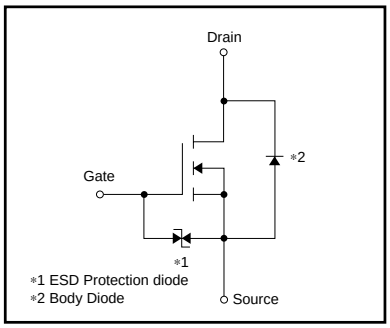
●External dimensions (Unit : mm)



●Packaging specifications

Type	Package	Bulk
	Code	–
	Basic ordering unit (pieces)	500
RDN150N20		○

●Equivalent circuit



*A protection diode is included between the gate and the source terminals to protect the diode against static electricity when the product is in use. Use the protection circuit when the fixed voltages are exceeded.

●Absolute maximum ratings (Ta=25°C)

Parameter		Symbol	Limits	Unit
Drain-Source Voltage		V_{DSS}	200	V
Gate-Source Voltage		V_{GSS}	±30	V
Drain Current	Continuous	I_D	15	A
	Pulsed	I_{DP} *1	45	A
Reverse Drain Current	Continuous	I_{DR}	15	A
	Pulsed	I_{DRP} *1	45	A
Source Current (Body Diode)	Continuous	I_S	15	A
	Pulsed	I_{SP} *1	45	A
Avalanche Current		I_{AS} *2	15	A
Avalanche Energy		E_{AS} *2	210	mJ
Total Power Dissipation (T_C=25°C)		P_D	40	W
Channel Temperature		T_{ch}	150	°C
Storage Temperature		T_{stg}	–55 to +150	°C

*1 Pw ≤ 10μs, Duty cycle ≤ 1%
*2 L≒1.4mH, V_{DD}=50V, R_G=25Ω, 1Pulse, Tch=25°C

●Thermal resistance

Parameter	Symbol	Limits	Unit
Channel to case	Rth(ch-c)	3.13	°C/W
Channel to ambient	Rth(ch-a)	62.5	°C/W