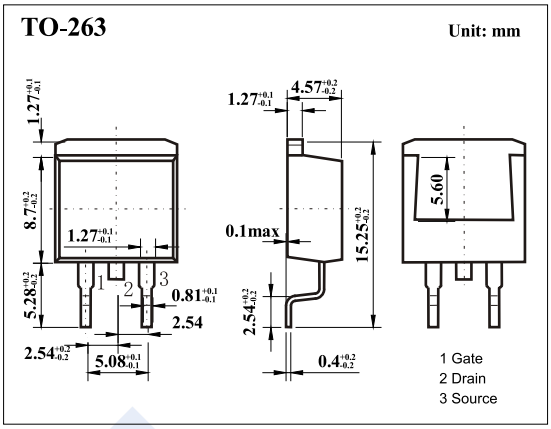
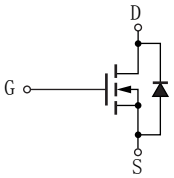
N-Channel MOSFET
2SK3269-ZJ



■ Features

- $V_{DS\ (V)}$ = 100V
- I_D = 25 A (V_{GS} = 10V)
- $R_{DS(ON)}$ < 100mΩ (V_{GS} = 10V)
- Low on-resistance, Low Qg
- High avalanche resistance



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	±20	
Continuous Drain Current	I_D	25	A
Pulsed Drain Current	I_{DM}	100	
Power Dissipation Tc = 25℃	P_D	40	W
Power Dissipation Ta = 25℃		1.4	
Single Avalanche Energy (Note.1)	E_{AS}	22.5	mJ
Thermal Resistance.Junction- to-Ambient	R_{thJA}	89.3	℃/W
Thermal Resistance.Junction- to-Case	R_{thJC}	3.125	
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	I_D=1mA, V_{GS}=0V	100			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=80V, V_{GS}=0V			10	uA
Gate-Body Leakage Current	I_{GSS}	V_{DS}=0V, V_{GS}=±20V			±1	uA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=10V , I_D=1mA	2		4	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=10V, I_D=12A			100	mΩ
Forward Transconductance	g_{FS}	V_{GS}=10V, I_D=12A	6	11		S
Input Capacitance	C_{iss}	V_{GS}=0V, V_{DS}=10V, f=1MHz		960		pF
Output Capacitance	C_{oss}			285		
Reverse Transfer Capacitance	C_{rss}			85		
Turn-On DelayTime	$t_{d(on)}$	V_{GS}=10V, V_{DS}=30V, I_D=12A,R_G=2.5Ω		15		ns
Turn-On Rise Time	t_r			10		
Turn-Off DelayTime	$t_{d(off)}$			65		
Turn-Off Fall Time	t_f			35		
Diode Forward Voltage	V_{SD}	I_S=15A,V_{GS}=0V			1.4	V

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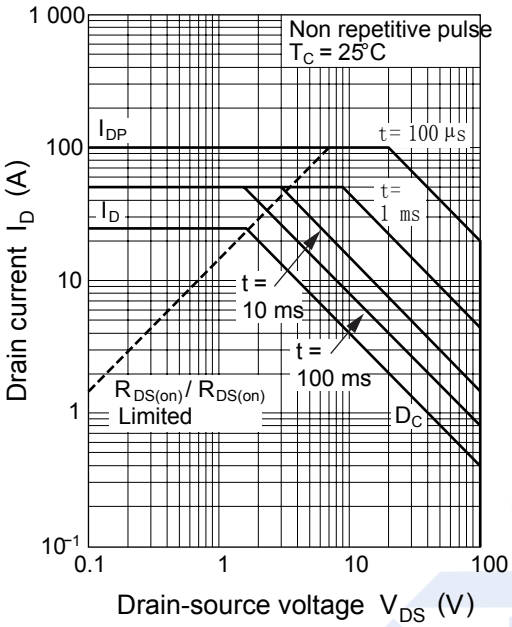
■ Typical Characterisitics

Safe operation area



P_D – T_a