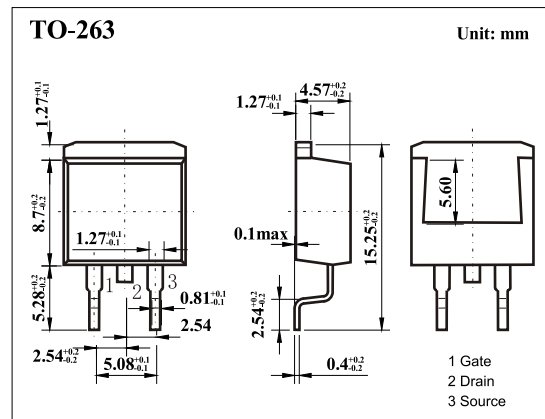
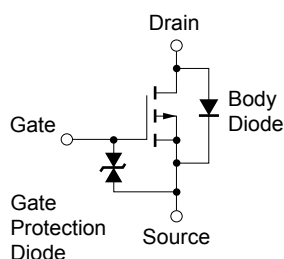


P-Channel MOSFET

2SJ606-ZJ

■ Features

- $V_{DS} (V) \approx -60V$
- $I_D \approx -83A$
- $R_{DS(ON)} < 15m\Omega$ ($V_{GS} \approx -10V$)
- $R_{DS(ON)} < 23m\Omega$ ($V_{GS} \approx -4V$)
- Low Ciss: Ciss = 4800 pF (TYP.)



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-60	V
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current	I_D	-83	A
Pulsed Drain Current (Note.1)	I_{DM}	-300	
Single Avalanche Current (Note.2)	I_{AS}	-40	
Power Dissipation $T_c = 25^\circ C$ $T_a = 25^\circ C$	P_D	120	W
		1.5	
Single Avalanche Energy (Note.2)	E_{AS}	160	mJ
Junction Temperature	T_J	150	$^\circ C$
Junction Storage Temperature Range	T_{stg}	-55 to 150	

Note.1: $PW \leq 10\mu s$, Duty Cycle $\leq 1\%$

Note.2: Starting $T_J = 25^\circ C$, $V_{DD} = -30V$, $R_G = 25\Omega$, $V_{GS} = -20V \rightarrow 0$

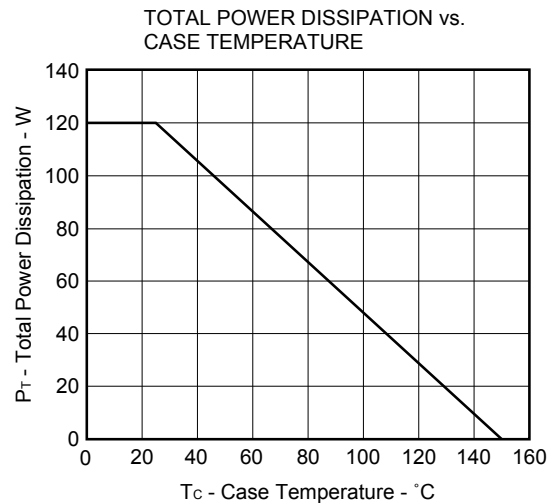
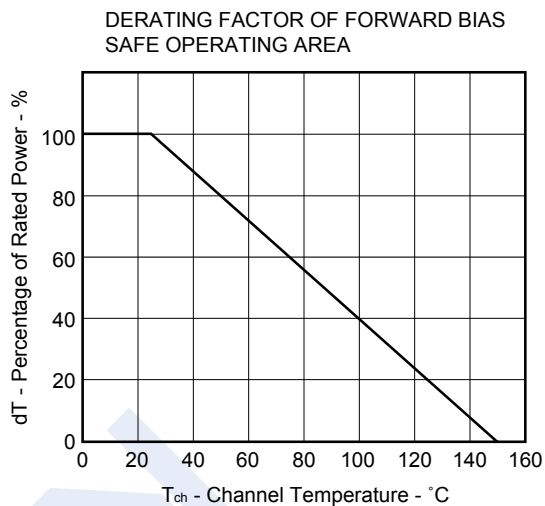
P-Channel MOSFET

2SJ606-ZJ

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DS}	$I_D = -250\ \mu\text{A}$, $V_{GS} = 0\text{V}$	-60			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -60\text{V}$, $V_{GS} = 0\text{V}$			-10	μA
Gate-Body leakage current	I_{GSS}	$V_{DS} = 0\text{V}$, $V_{GS} = \pm 20\text{V}$			± 10	μA
Gate Cut off Voltage	$V_{GS(off)}$	$V_{DS} = -10\text{V}$, $I_D = -1\text{mA}$	-1.5		-2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = -10\text{V}$, $I_D = -42\text{A}$			15	$\text{m}\Omega$
		$V_{GS} = -4\text{V}$, $I_D = -42\text{A}$			23	
Forward Transconductance	g_{FS}	$V_{DS} = -10\text{V}$, $I_D = -42\text{A}$	38	74		S
Input Capacitance	C_{iss}	$V_{GS} = 0\text{V}$, $V_{DS} = -10\text{V}$, $f = 1\text{MHz}$		4800		pF
Output Capacitance	C_{oss}			1200		
Reverse Transfer Capacitance	C_{rss}			340		
Total Gate Charge	Q_g	$V_{GS} = -10\text{V}$, $V_{DS} = -48\text{V}$, $I_D = -83\text{A}$		120		nC
Gate Source Charge	Q_{gs}			20		
Gate Drain Charge	Q_{gd}			30		
Turn-On DelayTime	$t_{d(on)}$	$V_{GS} = -10\text{V}$, $V_{DS} = -30\text{V}$, $I_D = -42\text{A}$, $R_G = 0\ \Omega$		13		ns
Turn-On Rise Time	t_r			13		
Turn-Off DelayTime	$t_{d(off)}$			290		
Turn-Off Fall Time	t_f			160		
Body Diode Reverse Recovery Time	t_{rr}	$I_F = -83\text{A}$, $V_{GS} = 0$, $di/dt = 100\text{A}/\mu\text{s}$		60		nC
Body Diode Reverse Recovery Charge	Q_{rr}			120		
Diode Forward Voltage	V_{SD}	$I_F = -83\text{A}$, $V_{GS} = 0\text{V}$		-1.1		V

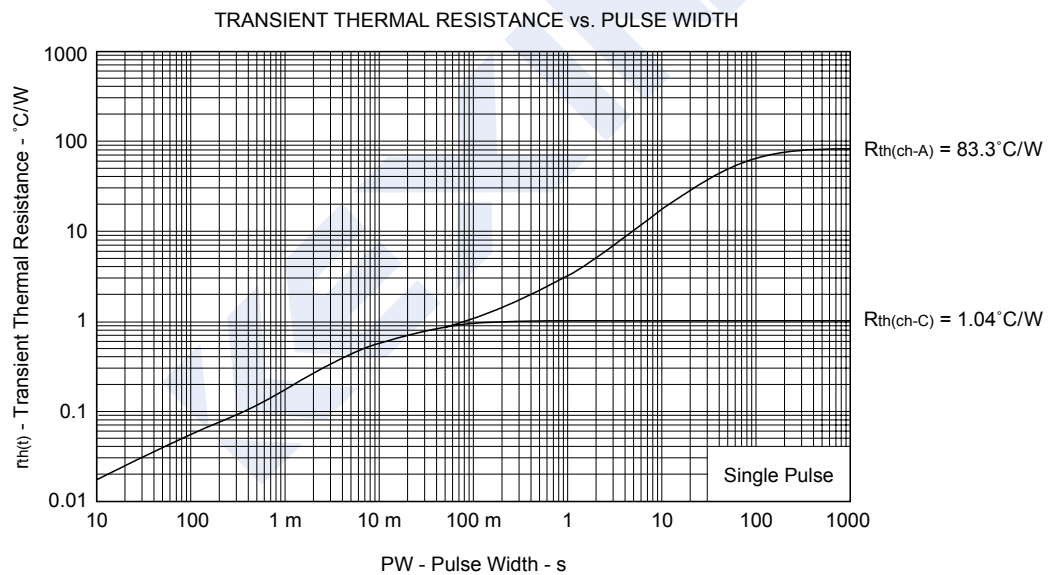
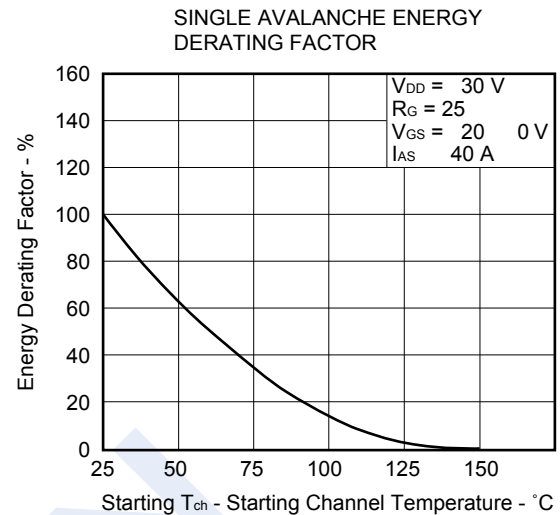
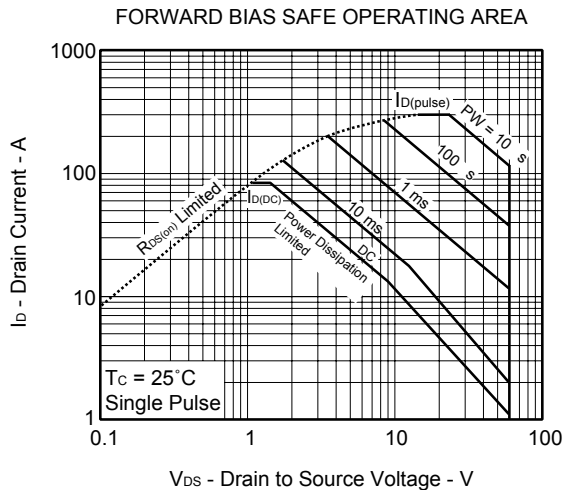
■ Typical Characteristics



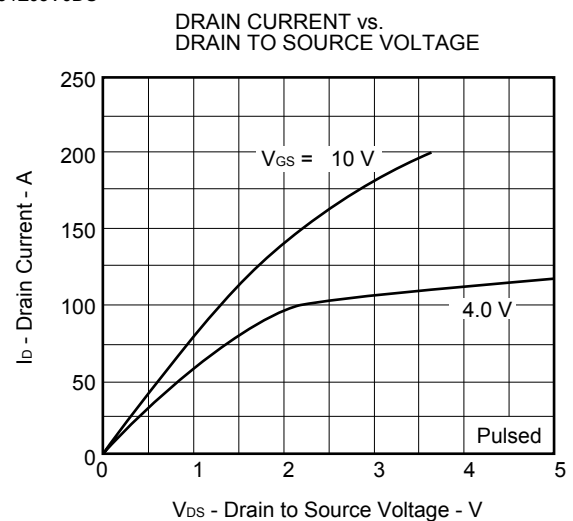
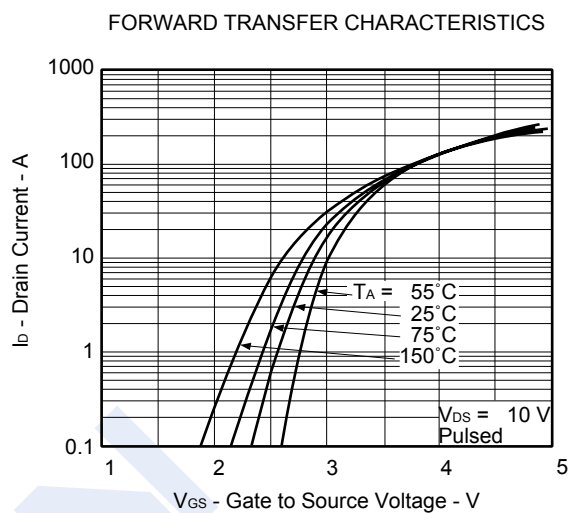
P-Channel MOSFET

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Typical Characteristics



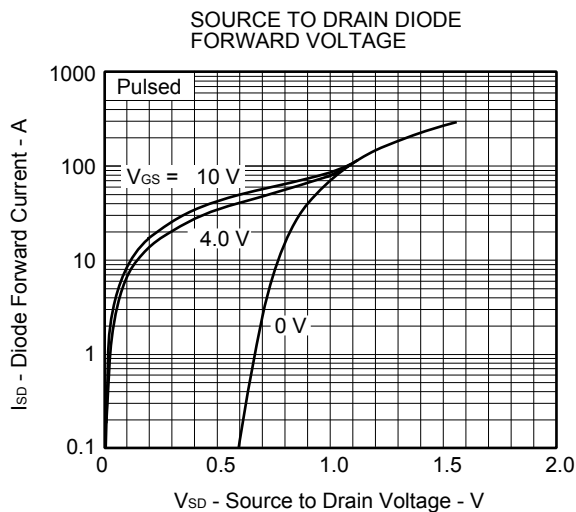
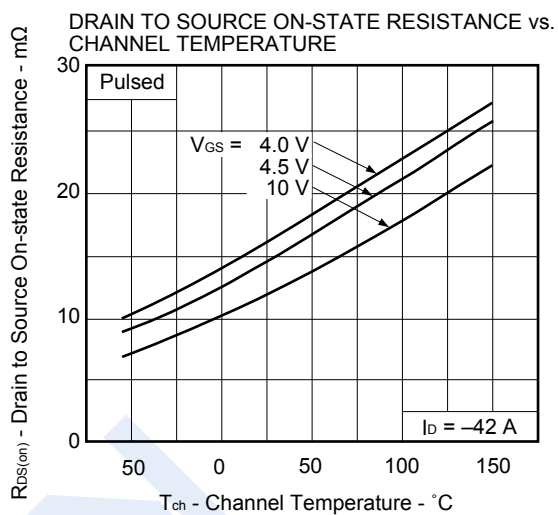
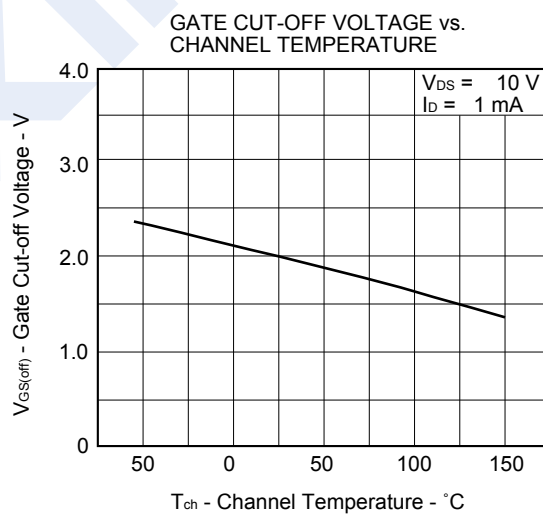
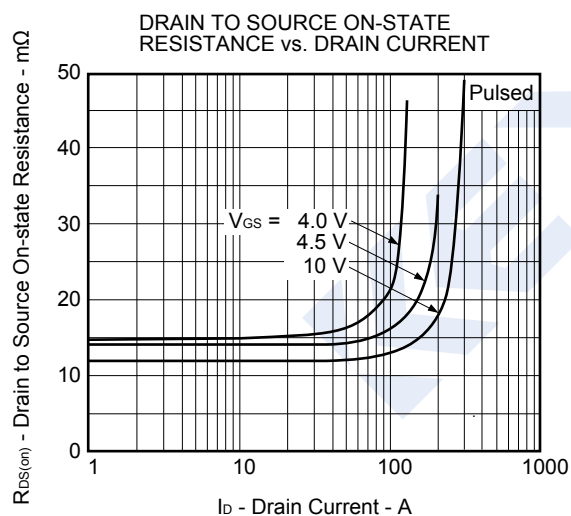
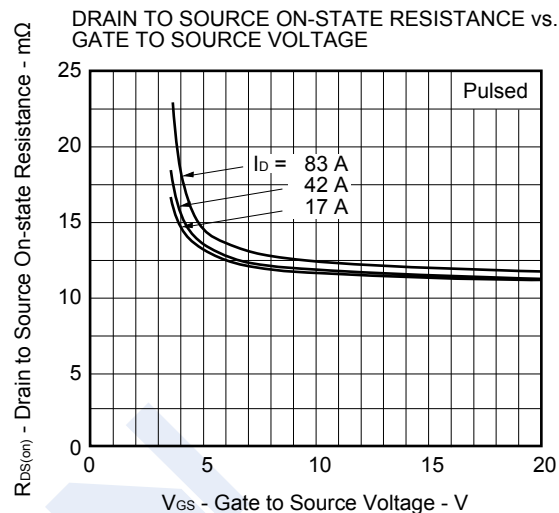
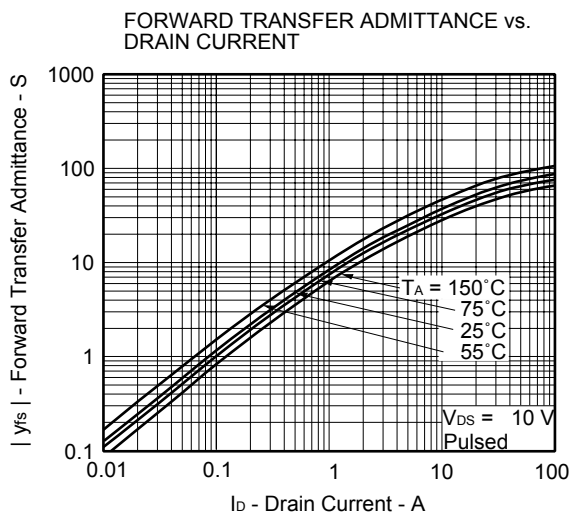
Data Sheet D14654EJ3V0DS



P-Channel MOSFET

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■ Typical Characteristics



P-Channel MOSFET

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■ Typical Characteristics

