



# FX607

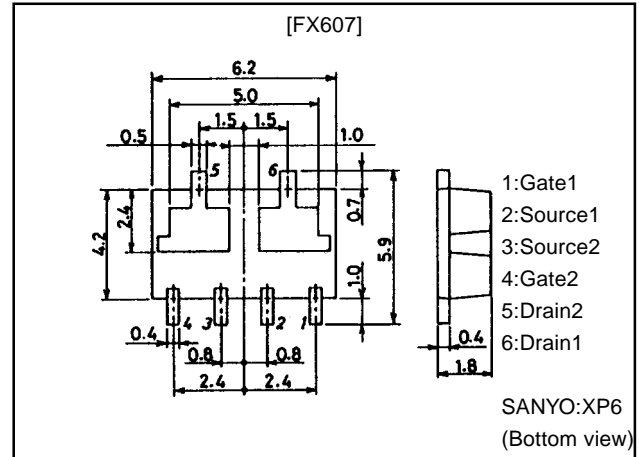
## N-Channel Silicon MOSFET Ultrahigh-Speed Switching, Motor Driver Applications

### Features

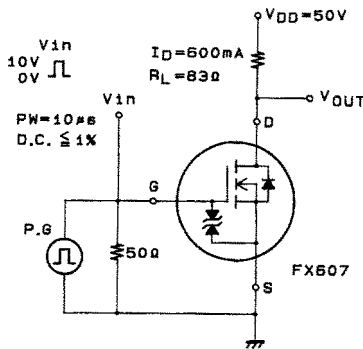
- Composite type composed of two low ON-resistance N-channel MOSFET chips for ultrahigh-speed switching and low-voltage drive.
- Facilitates high-density mounting.
- The FX607 is formed with two chips, each being equivalent to the 2SK2260, placed in one package.
- Matched pair characteristics.

### Package Dimensions

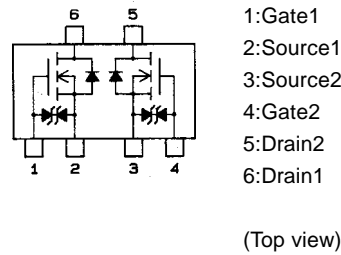
unit:mm  
2120



### Switching Time Test Circuit



### Electrical Connection



### Specifications

#### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	$V_{DSS}$		150	V
Gate-to-Source Voltage	$V_{GSS}$		±20	V
Drain Current (DC)	$I_D$		1.2	A
Drain Current (Pulse)	$I_{DP}$	$PW \leq 10\mu s$ , duty cycle $\leq 1\%$	4.8	A
Allowable Power Dissipation	$P_D$	$T_c = 25^\circ C$ , 1 unit	6	W
		Mounted on ceramic board (750mm <sup>2</sup> ×0.8mm) 1 unit	1.5	W
Total Dissipation	$P_T$	Mounted on ceramic board (750mm <sup>2</sup> ×0.8mm)	2	W
Channel Temperature	$T_{ch}$		150	°C
Storage Temperature	$T_{stg}$		-55 to +150	°C

· Marking:607

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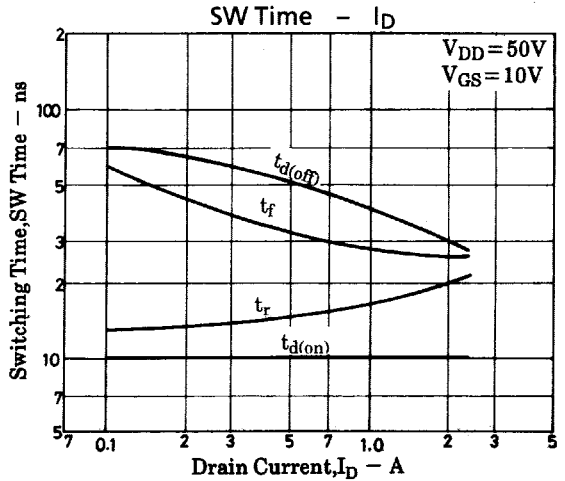
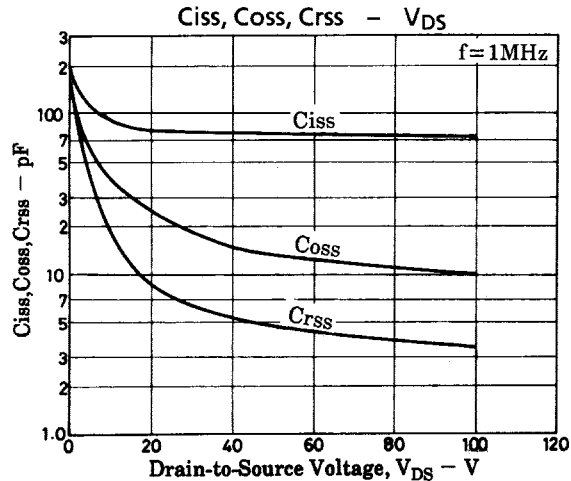
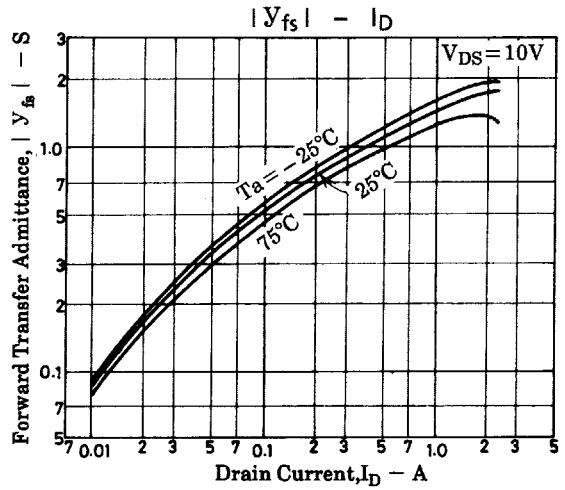
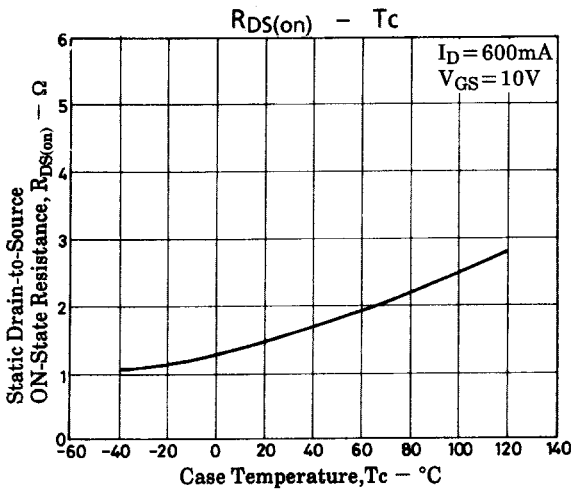
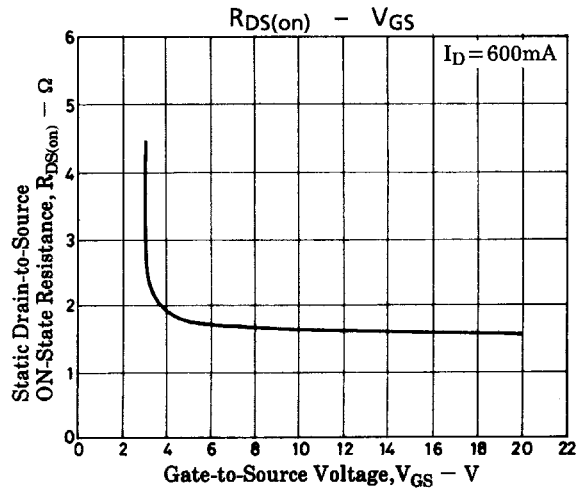
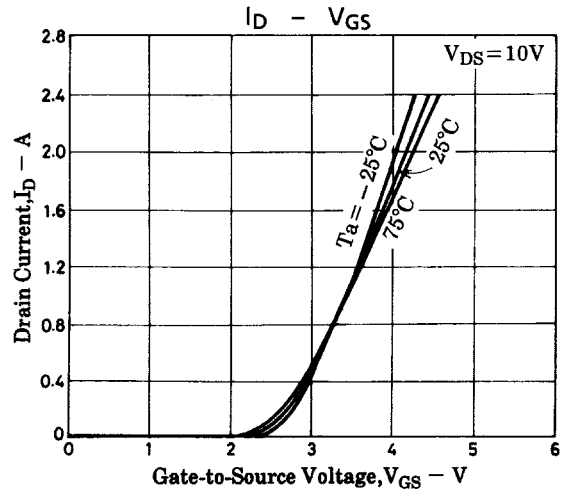
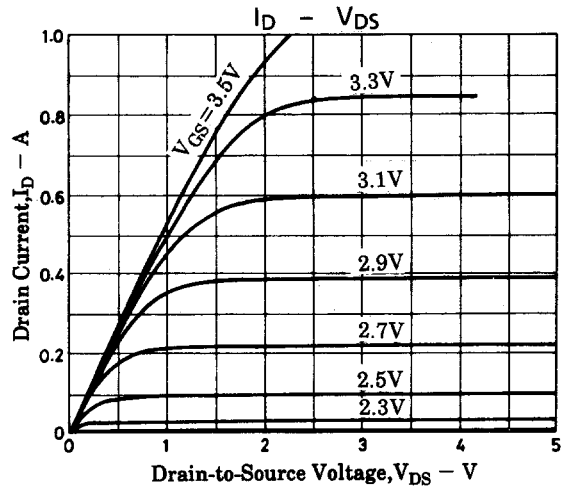
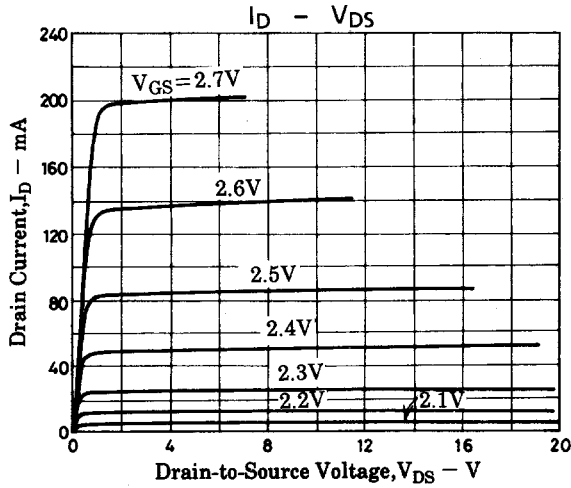
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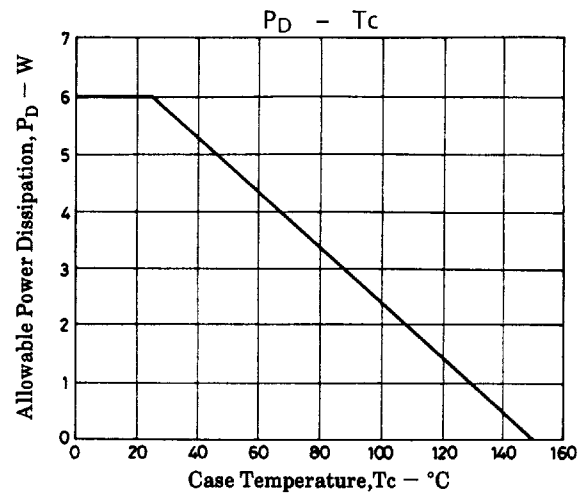
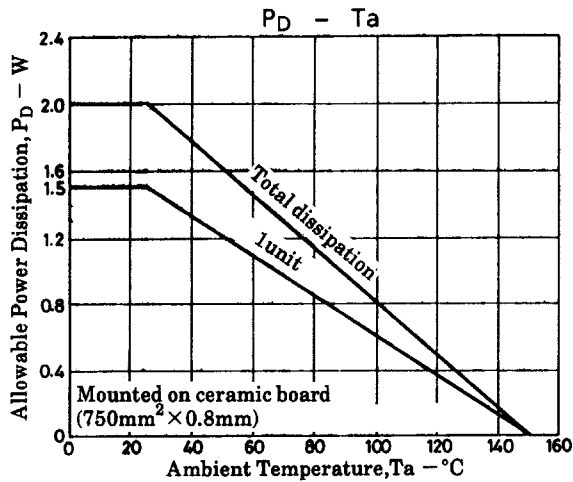
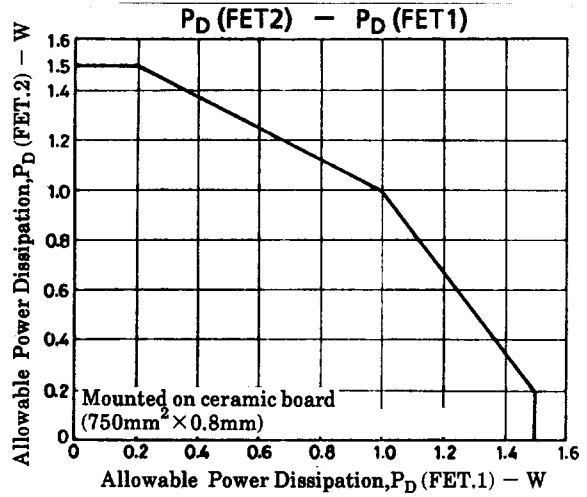
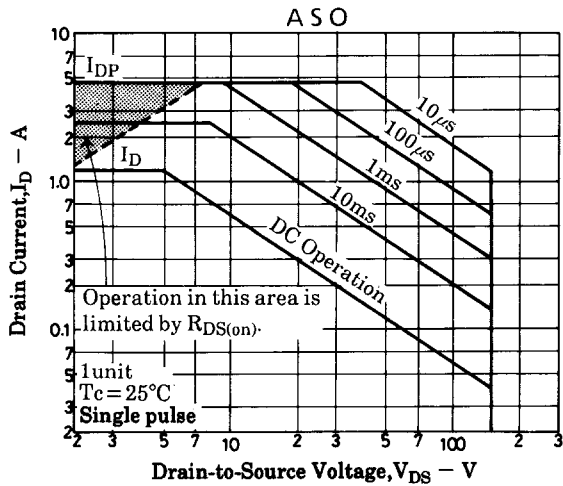
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### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D=1mA, V_{GS}=0$	150			V
Zero-Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=150V, V_{GS}=0$			100	$\mu A$
Gate-to-Source Leakage Current	$I_{GSS}$	$V_{GS}=\pm 18V, V_{DS}=0$			$\pm 10$	$\mu A$
Cutoff Voltage	$V_{GS(off)}$	$V_{DS}=10V, I_D=1mA$	1.5		2.5	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS}=10V, I_D=600mA$	0.8	1.1		S
Static Drain-to-Source ON-State Resistance	$R_{DS(on)}$	$I_D=600mA, V_{GS}=10V$		1.6	2.2	$\Omega$
Input Capacitance	$C_{iss}$	$V_{DS}=20V, f=1MHz$		80		pF
Output Capacitance	$C_{oss}$	$V_{DS}=20V, f=1MHz$		25		pF
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS}=20V, f=1MHz$		8.5		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit		10		ns
Rise Time	$t_r$	See specified Test Circuit		15		ns
Turn-OFF Delay Time	$t_{d(off)}$	See specified Test Circuit		50		ns
Fall Time	$t_f$	See specified Test Circuit		30		ns
Diode Forward Voltage	$V_{SD}$	$I_S=1.2A, V_{GS}=0$		1.0		V

# FX607





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