

SANYO

FX607

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

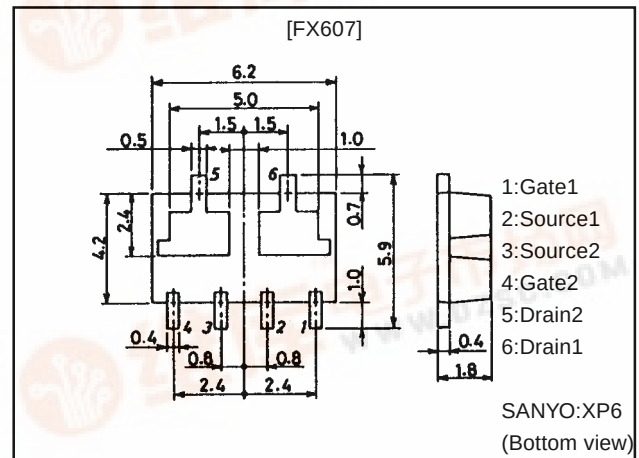
Features

- 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.

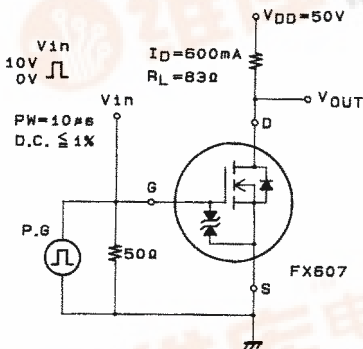
Package Dimensions

unit:mm

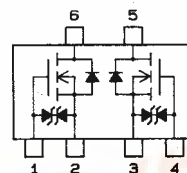
2120



Switching Time Test Circuit



Electrical Connection



- 1: Gate1
- 2: Source1
- 3: Source2
- 4: Gate2
- 5: Drain2
- 6: Drain1

(Top view)

Specifications

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

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}	$PW \leq 10\mu\text{s}$, duty cycle $\leq 1\%$	4.8	A
Allowable Power Dissipation	P_D	$T_c = 25^\circ\text{C}$, 1 unit	6	W
	P_D	Mounted on ceramic board (750mm ² ×0.8mm) 1 unit	1.5	W
Total Dissipation	P_T	Mounted on ceramic board (750mm ² ×0.8mm)	2	W
Channel Temperature	T_{ch}		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

· Marking:607

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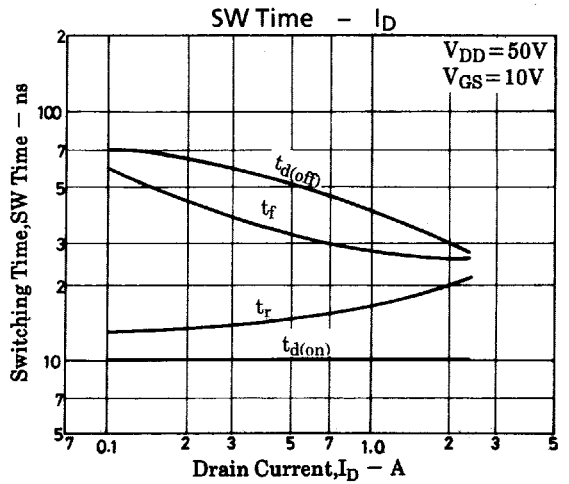
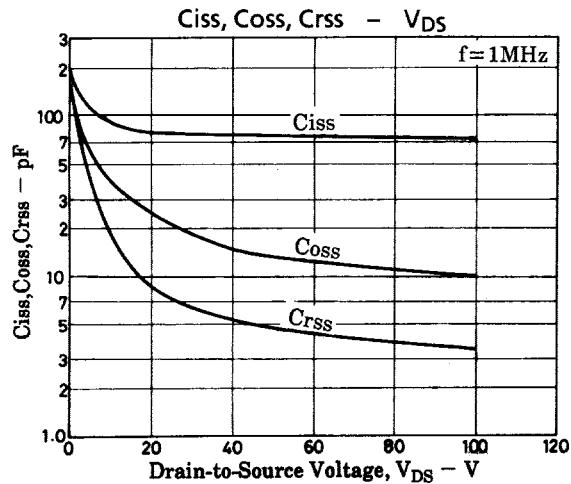
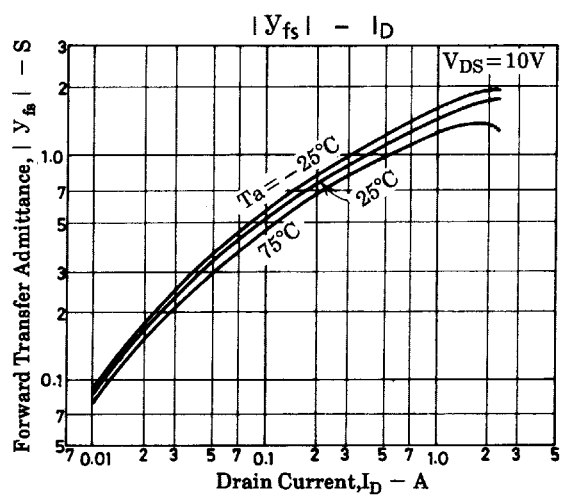
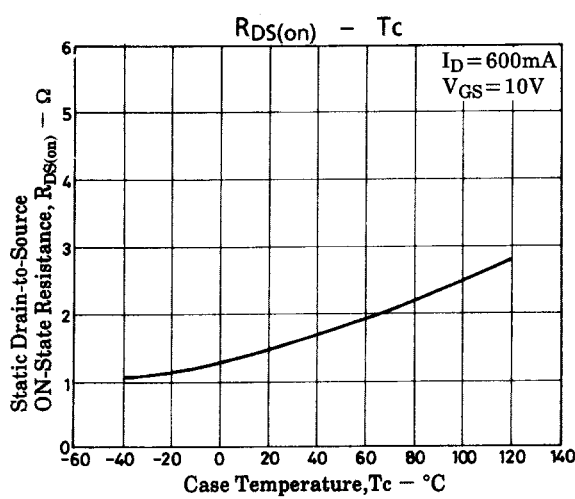
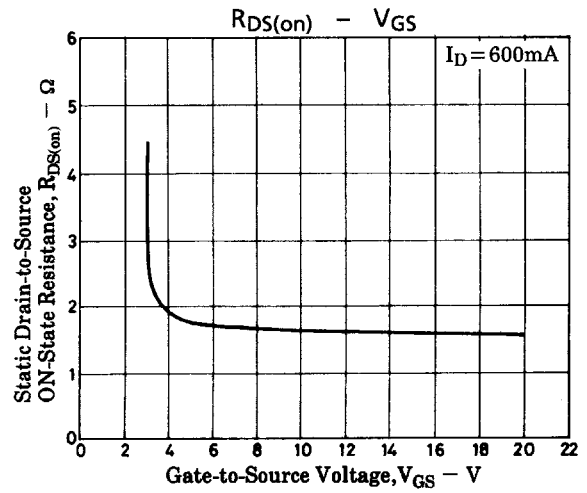
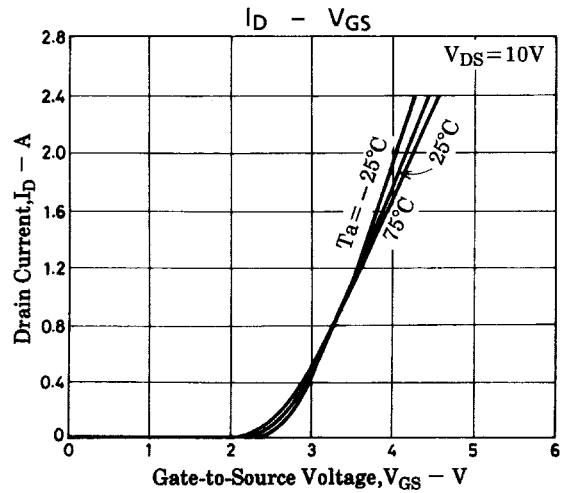
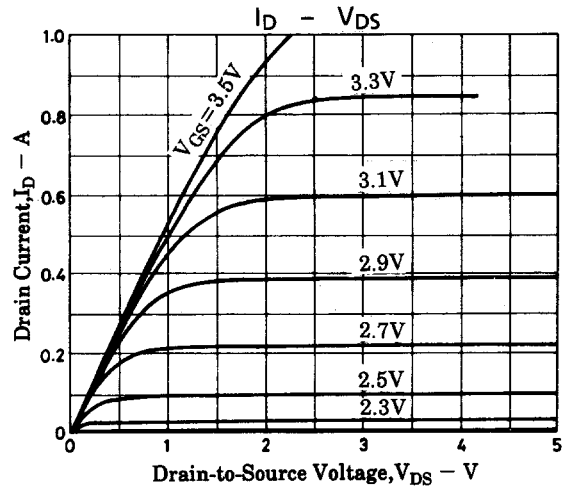
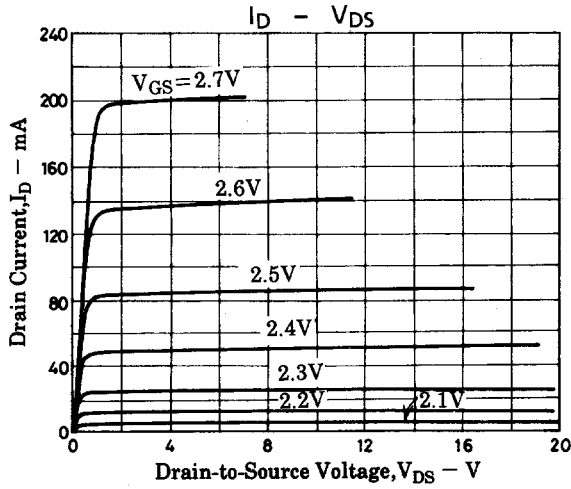
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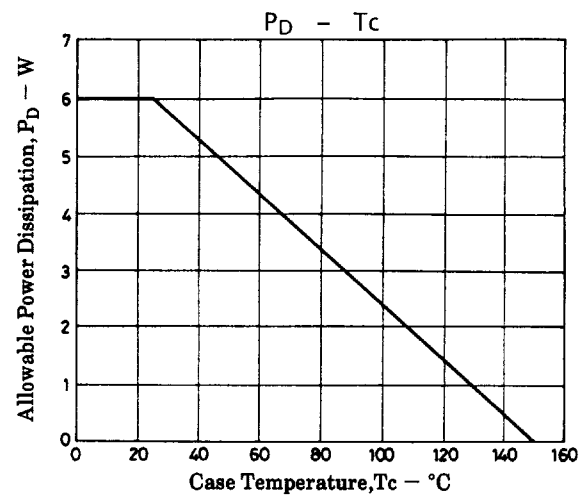
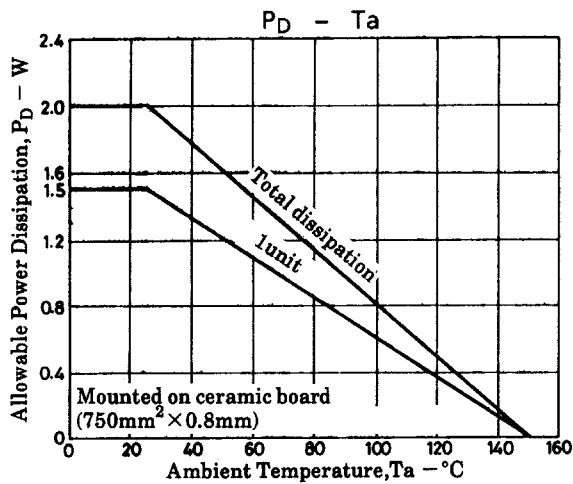
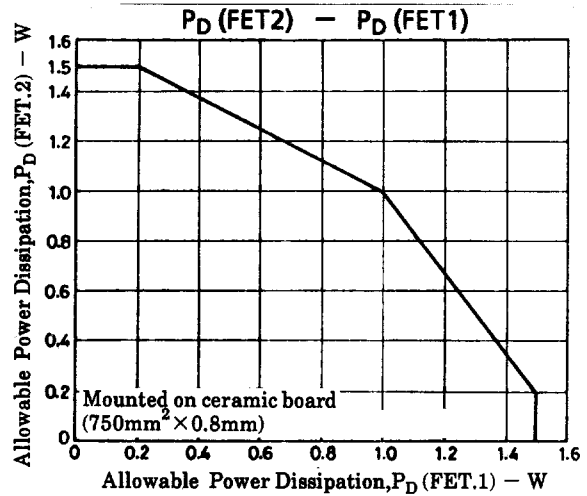
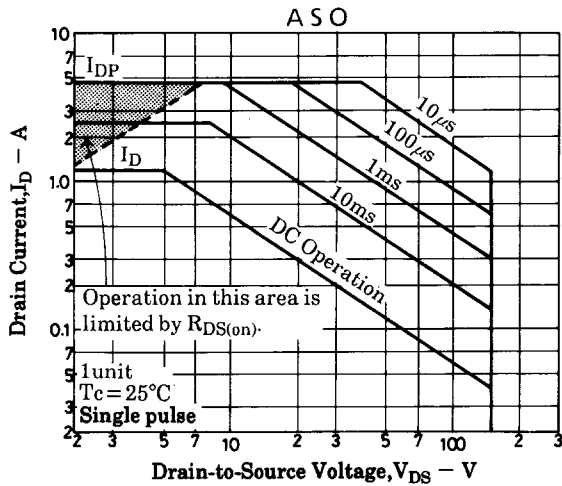
Electrical Characteristics at Ta = 25°C

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	μA
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS}=\pm 18V, V_{DS}=0$			± 10	μA
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	Ω
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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