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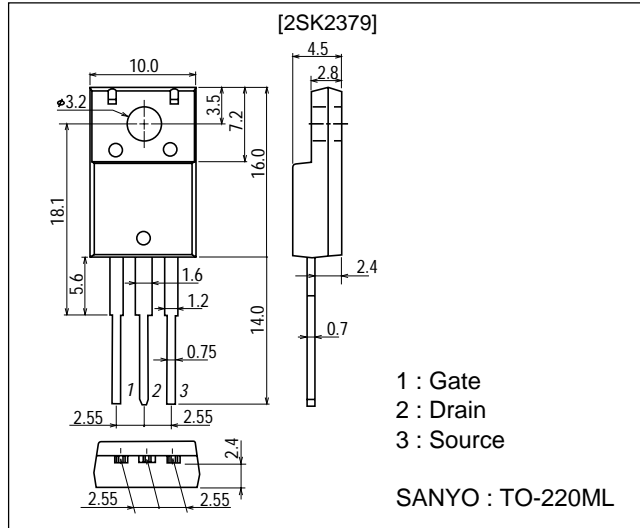
Ultrahigh-Speed Switching Applications

Features

- Low ON-resistance.
- Ultrahigh-speed switching.
- Low-voltage drive.
- Micalless package facilitaing mounting.

Package Dimensions

unit : mm
2063A



Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSS}		200	V
Gate-to-Source Voltage	V _{GSS}		±20	V
Drain Current (DC)	I _D		20	A
Drain Current (Pulse)	I _{DP}	PW≤10μs, duty cycle≤1%	80	A
Allowable Power Dissipation	P _D		2.0	W
		T _c =25°C	40	W
Channel Temperature	T _{ch}		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	V(BR) _{DSS}	I _D =1mA, V _{GS} =0	200			V
Gate-to-Source Breakdown Voltage	V(BR) _{GSS}	I _G =±100μA, V _{DS} =0	±20			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =200V, V _{GS} =0			100	μA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} =±16V, 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 =10A	9.5	16		S

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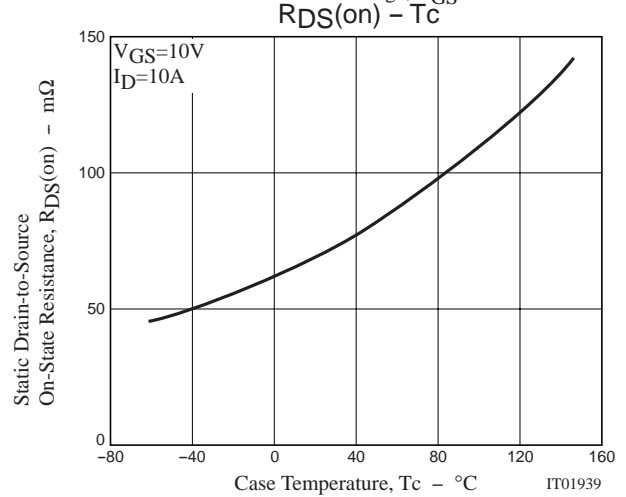
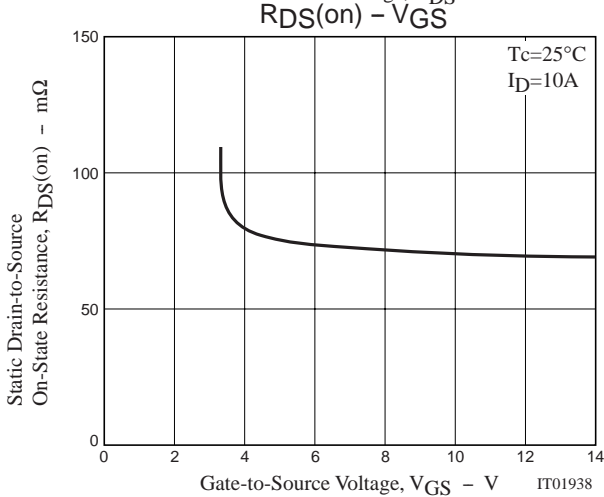
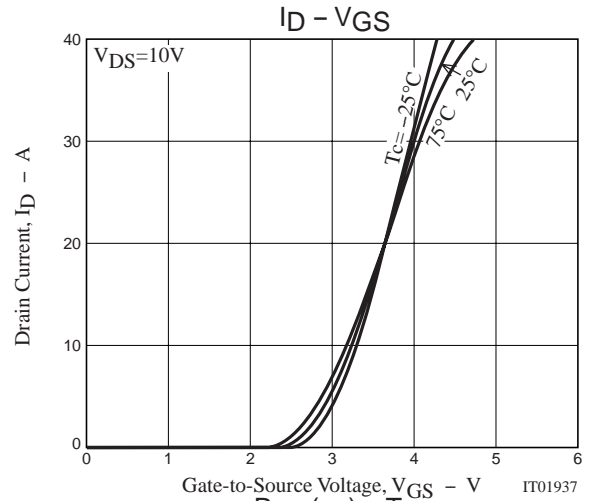
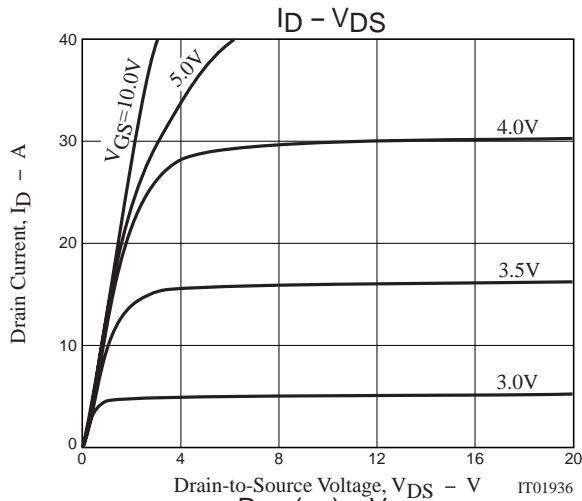
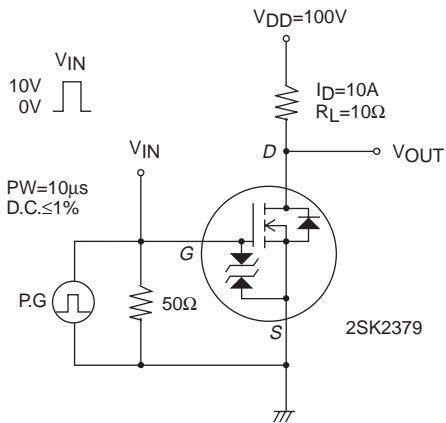
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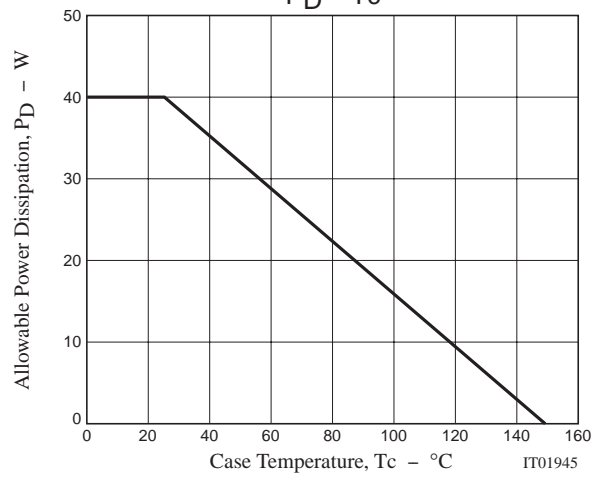
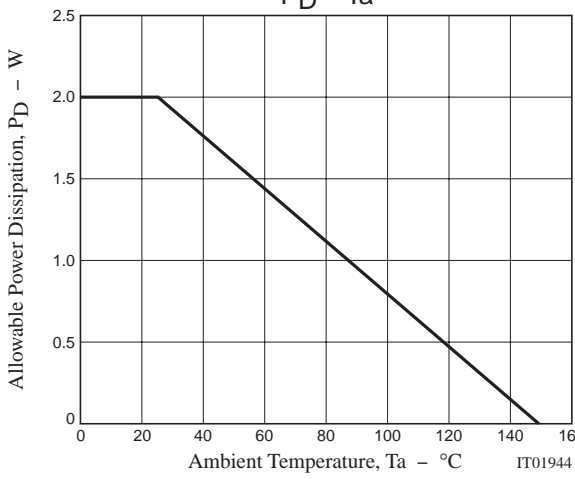
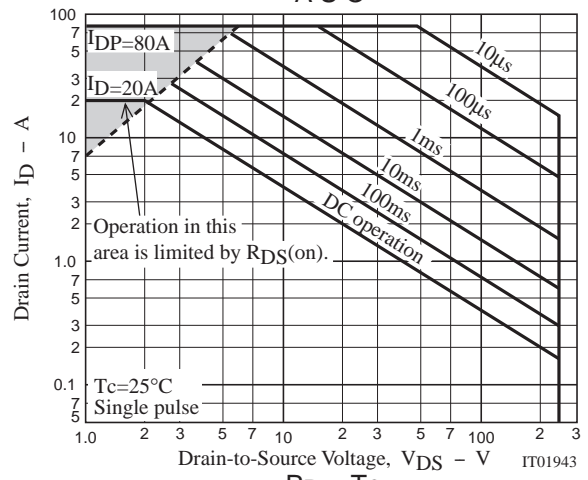
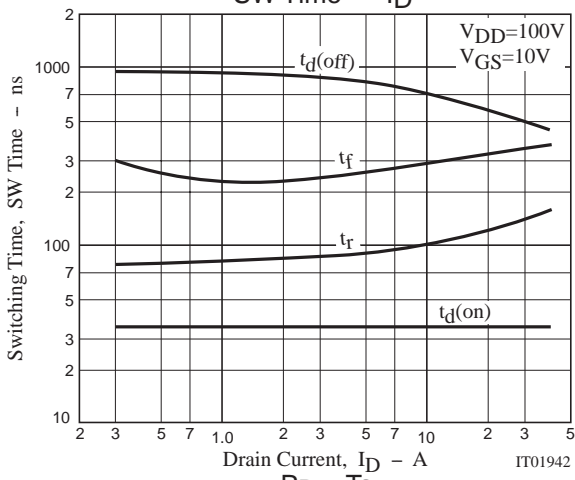
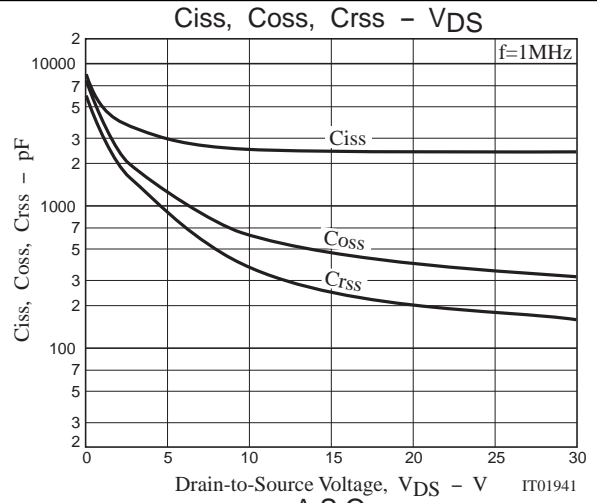
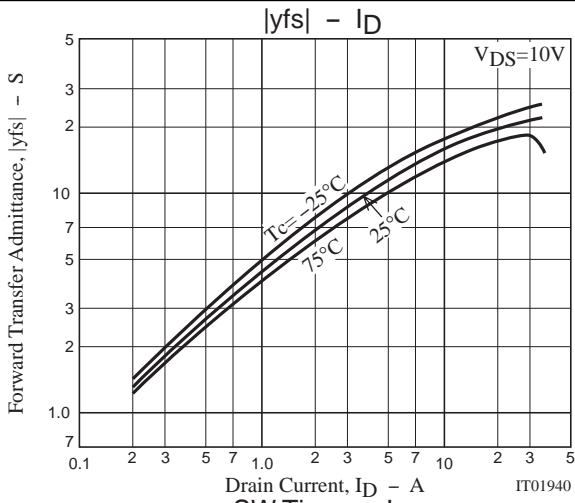
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Static Drain-to-Source On-State Resistance	$R_{DS(on)}$	$I_D=10A, V_{GS}=10V$		70	95	m Ω
Input Capacitance	C_{iss}	$V_{DS}=20V, f=1MHz$		2400		pF
Output Capacitance	C_{oss}	$V_{DS}=20V, f=1MHz$		500		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=20V, f=1MHz$		200		pF
Turn-ON Delay Time	$t_d(on)$	See specified Test Circuit		35		ns
Rise Time	t_r	See specified Test Circuit		100		ns
Turn-OFF Delay Time	$t_d(off)$	See specified Test Circuit		710		ns
Fall Time	t_f	See specified Test Circuit		290		ns
Diode Forward Voltage	V_{SD}	$I_S=20A, V_{GS}=0$		1.0	1.5	V

Marking : K2379

Switching Time Test Circuit



2SK2379



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