

SANYO	No.4315	2SK2058
		N-Channel MOS Silicon FET Very High-Speed Switching Applications

Features

- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.

Absolute Maximum Ratings at Ta = 25°C

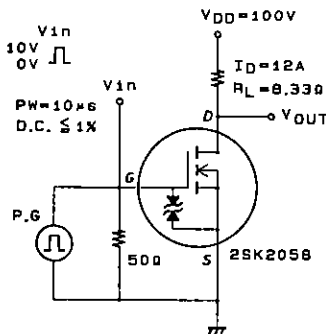
			unit
Drain-to-Source Voltage	V _{DSS}	250	V
Gate-to-Source Voltage	V _{GSS}	±30	V
Drain Current(DC)	I _D	25	A
Drain Current(Pulse)	I _{DP}	100	A
Allowable Power Dissipation	P _D	2.5	W
		120	W
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

T_c = 25°C

Electrical Characteristics at Ta = 25°C

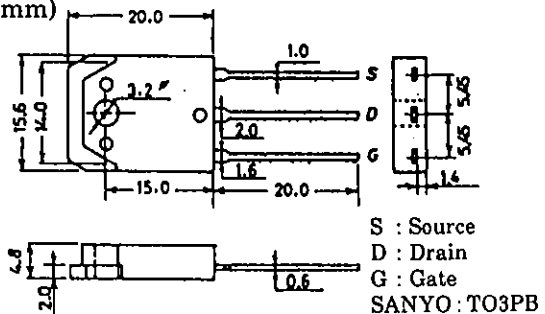
			min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	I _D = 1mA, V _{GS} = 0	250			V
G-S Breakdown Voltage	V _{(BR)GSS}	I _G = ±100μA, V _{DS} = 0	±30			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = 250V, V _{GS} = 0			100	μA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} = ±25V, V _{DS} = 0			±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 = 12A	11	18		S
Static Drain-to-Source on State Resistance	R _{DS(on)}	I _D = 12A, V _{GS} = 10V	0.12	0.16		Ω
Input Capacitance	C _{iss}	V _{DS} = 20V, f = 1MHz		2700		pF
Output Capacitance	C _{oss}	V _{DS} = 20V, f = 1MHz		450		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = 20V, f = 1MHz		180		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		35		ns
Rise Time	t _r	“		65		ns
Turn-OFF Delay Time	t _{d(off)}	“		210		ns
Fall Time	t _f	“		235		ns
Diode Forward Voltage	V _{SD}	I _S = 25A, V _{GS} = 0	1.0	1.5		V

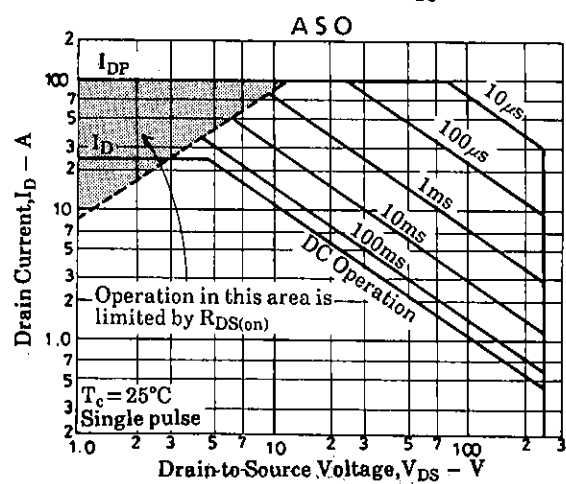
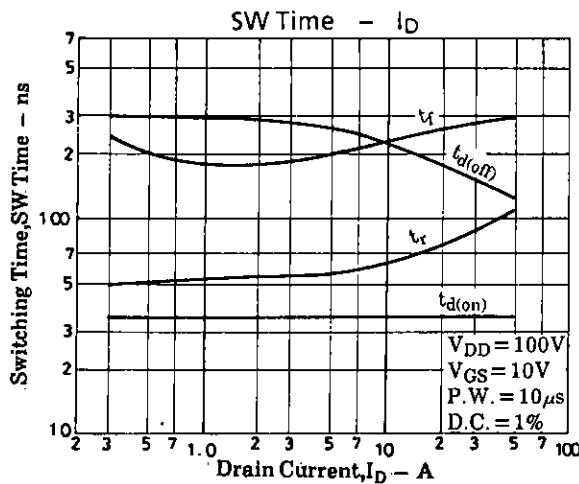
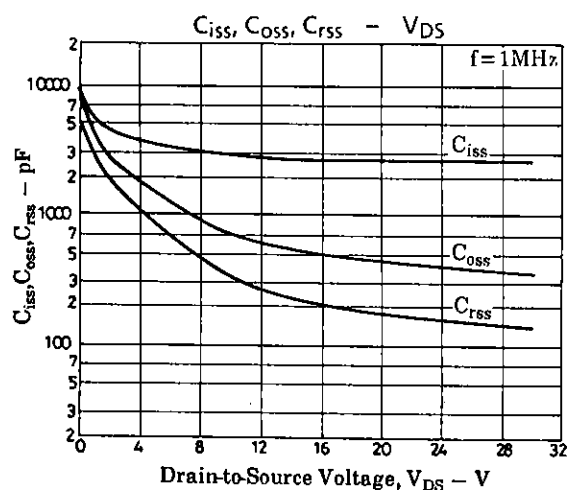
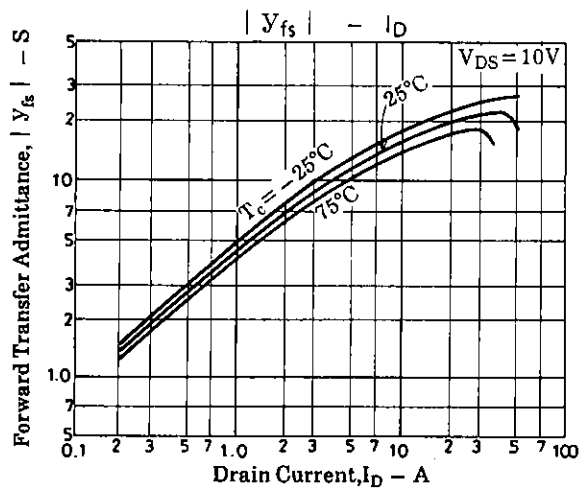
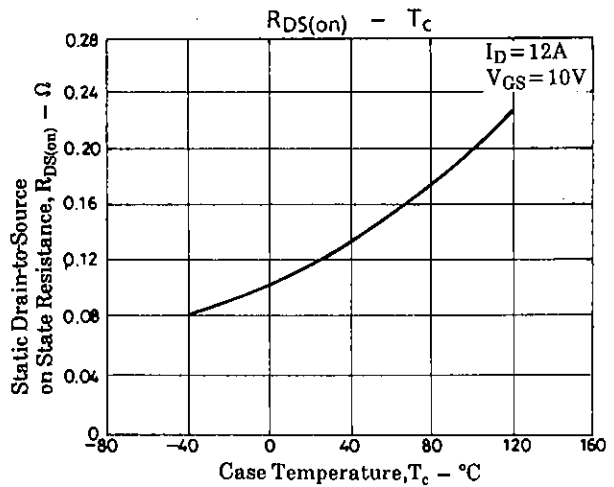
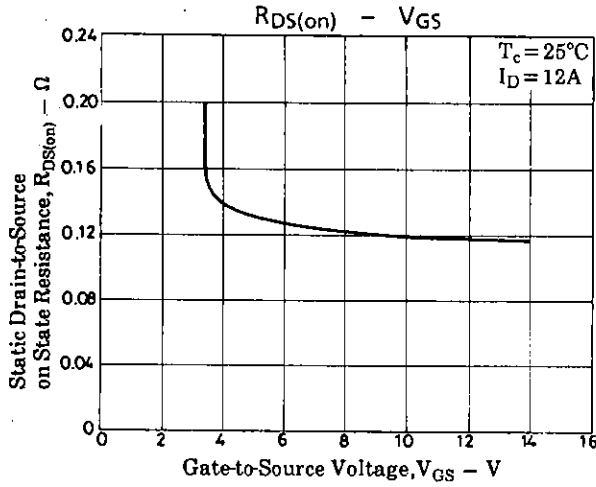
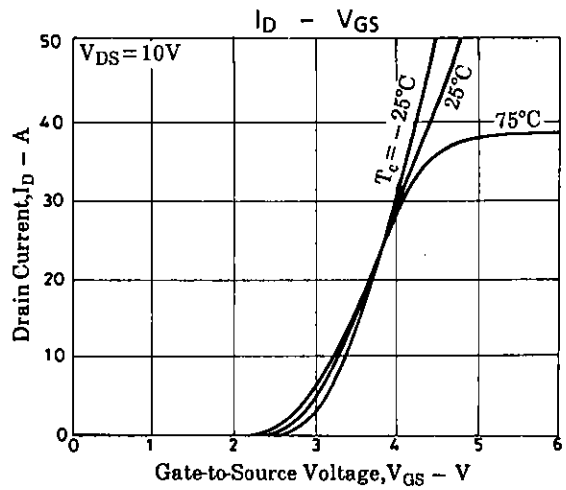
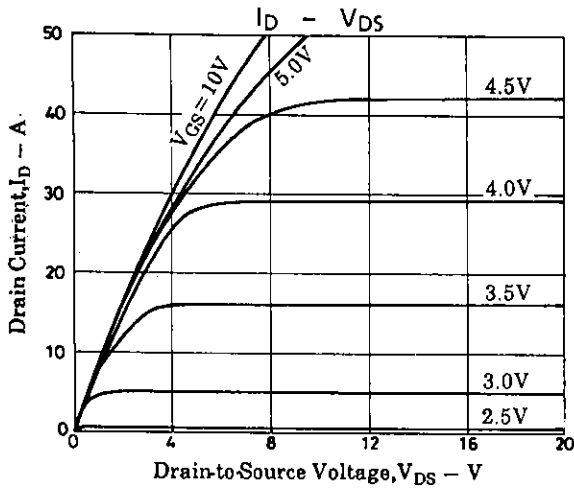
Switching Time Test Circuit

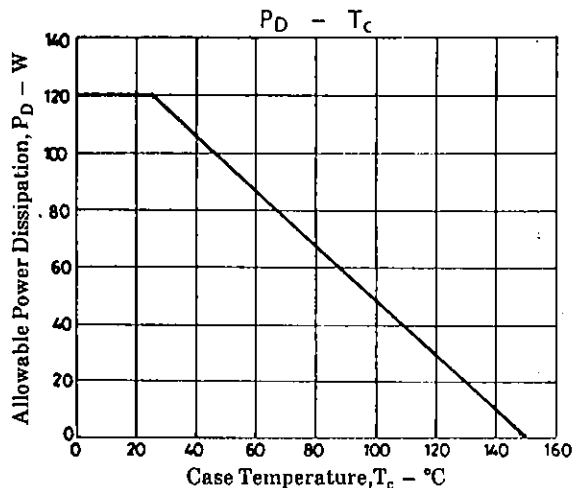
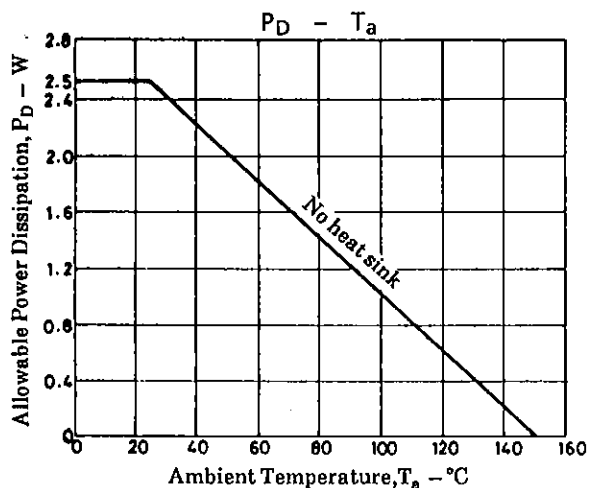


Package Dimension 2056

(unit : mm)







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