

SANYO	No.3465	2SK1462
		N-Channel MOS Silicon FET

Very High-Speed Switching Applications

Features

- Low ON-state resistance.
- Very high-speed switching.
- Converters.

Absolute Maximum Ratings at Ta = 25°C

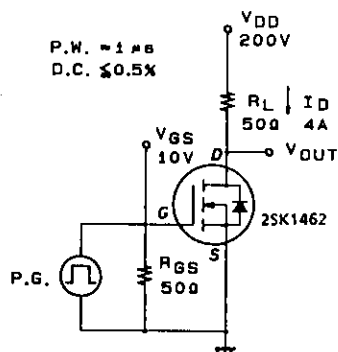
				unit
Drain to Source Voltage	V _{DSS}	900	V	
Gate to Source Voltage	V _{GS}	±30	V	
Drain Current(DC)	I _D	8	A	
Drain Current(Pulse)	I _{DP}	PW ≤ 10μs, duty cycle ≤ 1%	16	A
Allowable Power Dissipation	P _D	Tc = 25°C	150	W
			2.5	W
Channel Temperature	T _{ch}	150	°C	
Storage Temperature	T _{stg}	-55 to +150	°C	

Electrical Characteristics at Ta = 25°C

D-S Breakdown Voltage	V _{(BR)DSS}	I _D = 1mA, V _{GS} = 0	900		V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = 900V, V _{GS} = 0		1.0	mA
Gate to Source Leakage Current	I _{GSS}	V _{GS} = ±30V, V _{DS} = 0		±100	nA
Cutoff Voltage	V _{GS(off)}	V _{DS} = 10V, I _D = 1mA	2.0	3.0	V
Forward Transfer Admittance	Y _{fs}	V _{DS} = 20V, I _D = 4A	2.5	5.0	S
Static Drain to Source on State Resistance	R _{DS(on)}	I _D = 4A, V _{GS} = 10V	1.2	1.6	Ω
Input Capacitance	C _{iss}	V _{DS} = 20V, f = 1MHz	1600		pF
Output Capacitance	C _{oss}	V _{DS} = 20V, f = 1MHz	500		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = 20V, f = 1MHz	350		pF
Turn-ON Delay Time	t _{d(on)}	I _D = 4A, V _{GS} = 10V V _{DD} = 200V, R _{GS} = 50Ω		20	ns
Rise Time	t _r		80	ns	
Turn-OFF Delay Time	t _{d(off)}		350	ns	
Fall Time	t _f		150	ns	
Diode Forward Voltage	V _{SD}		I _S = 8A, V _{GS} = 0		1.8

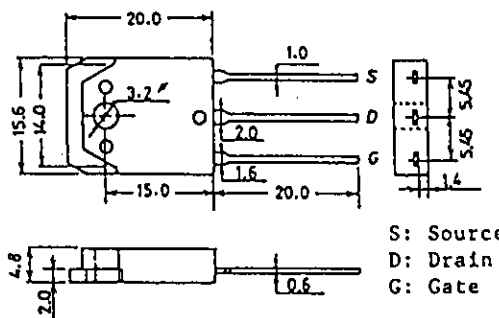
(Note) Be careful in handling the 2SK1462 because it has no protection diode between gate and source.

Switching Time Test Circuit

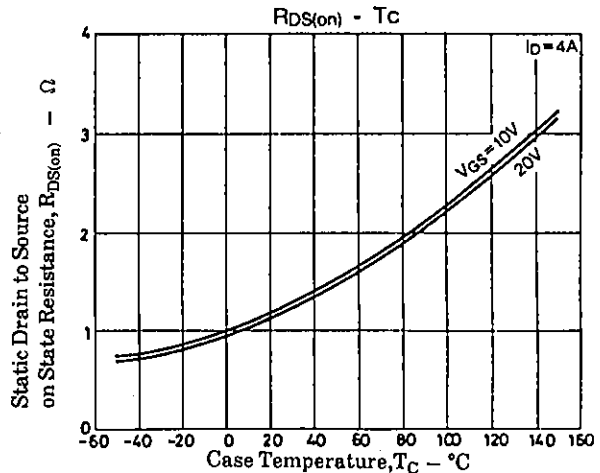
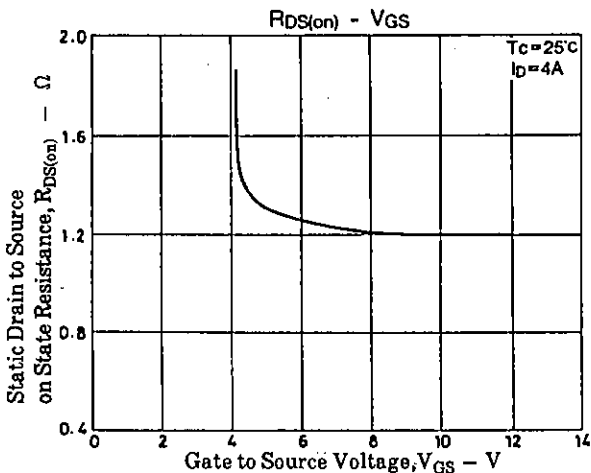
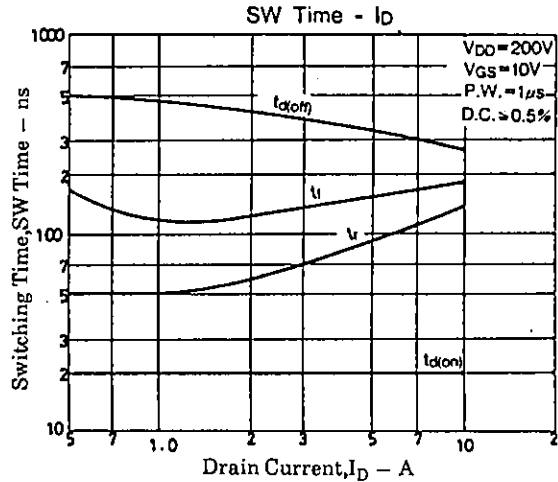
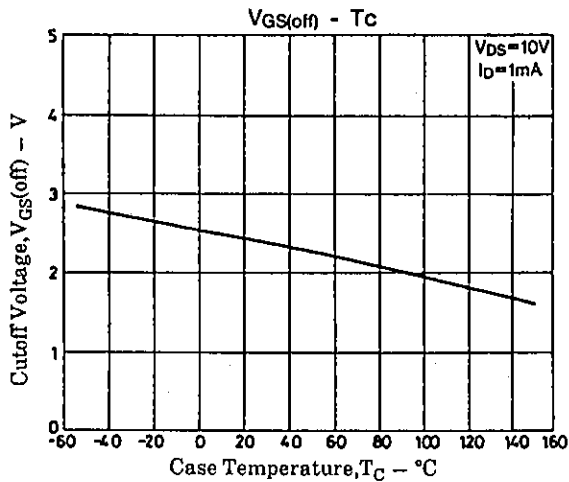
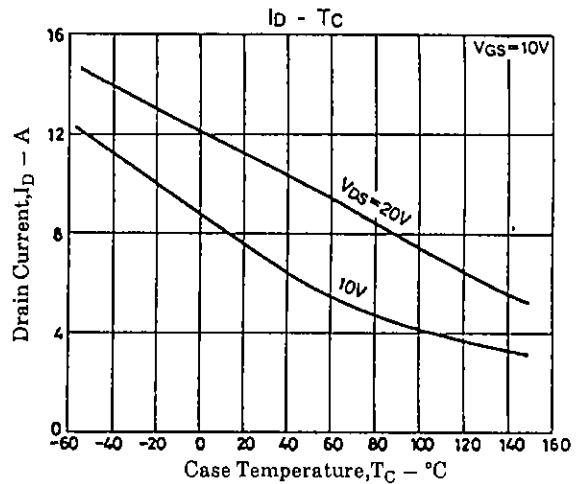
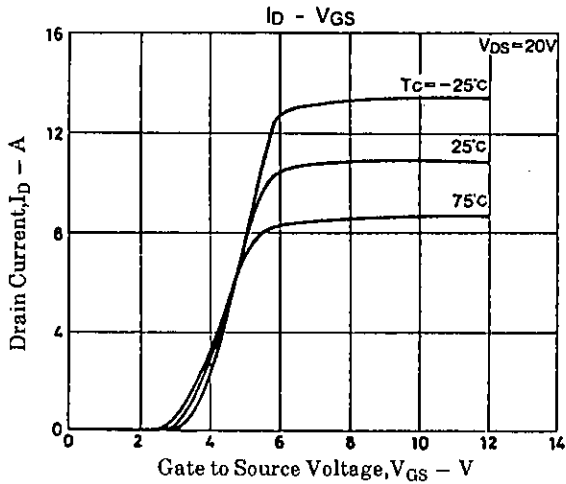
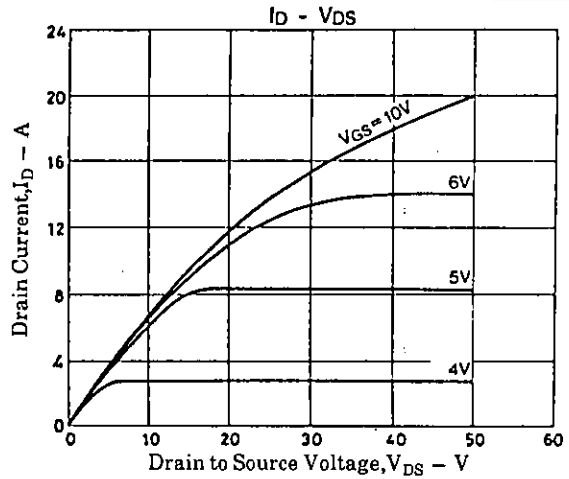
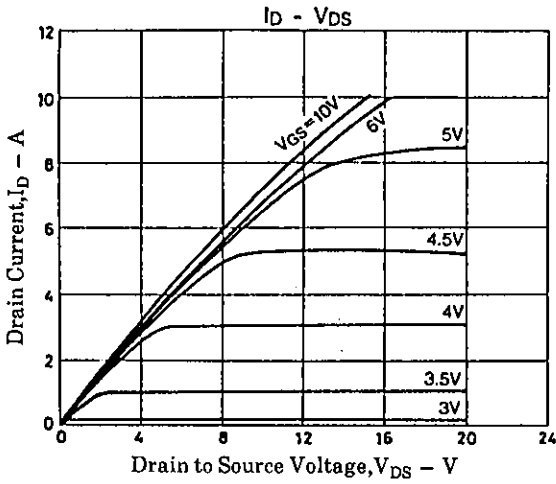


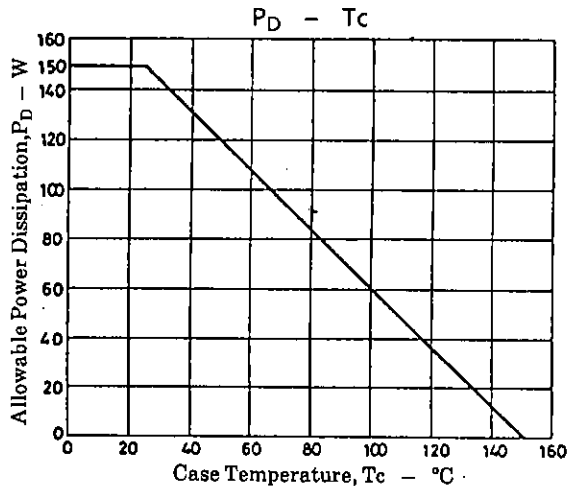
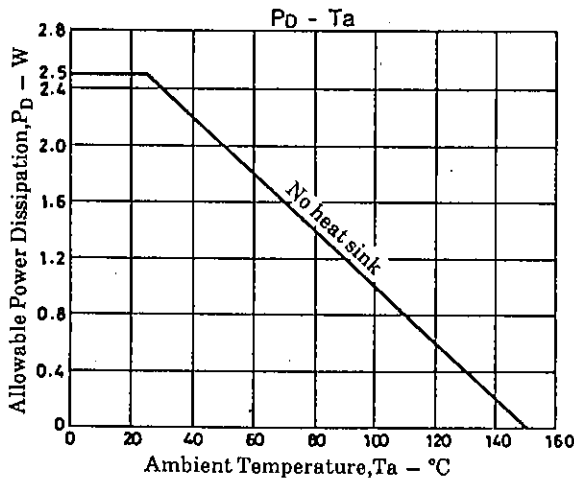
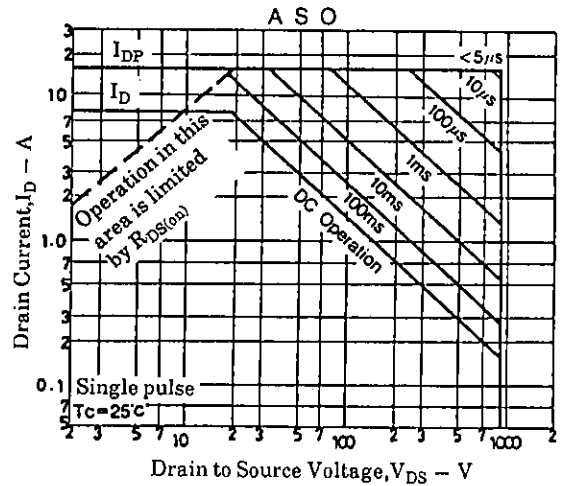
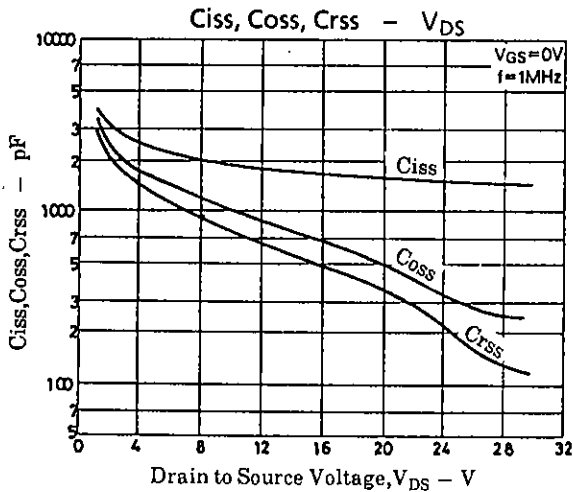
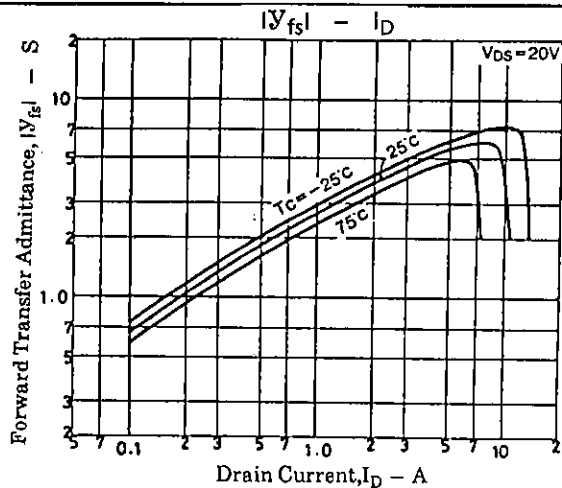
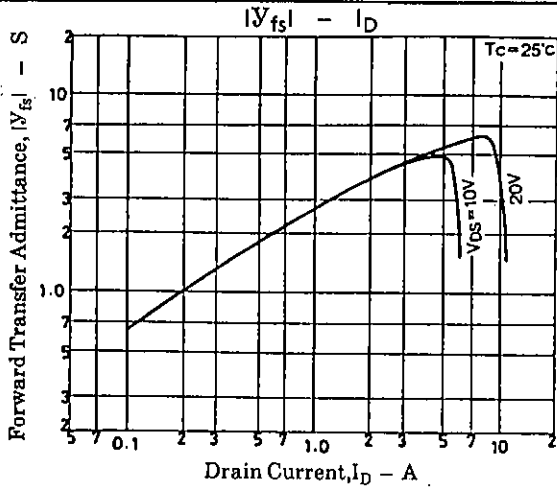
Package Dimensions 2056

(unit: mm)



SANYO: TO3PB





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