



2SJ458 — P-Channel Silicon MOSFET

General-Purpose Switching Device Applications

Features

- Ultrahigh-speed switching.
- High-speed diod.

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSS}		-450	V
Gate-to-Source Voltage	V _{GSS}		±30	V
Drain Current (DC)	I _D		-2	A
Drain Current (Pulse)	I _{DP}		-8	A
Allowable Power Dissipation	P _D		1.65	W
		T _c =25°C	60	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 =-10mA, V _{GS} =0V	-450			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =-360V, V _{GS} =0V			-1.0	mA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} =±30V, V _{DS} =0V			±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} =-10V, I _D =-1A	0.6	1.2		S
Static Drain-to-Source On-State Resistance	R _{DS(on)}	I _D =-1A, V _{GS} =10V		4.0	5.5	Ω
Input Capacitance	C _{iss}	V _{DS} =-20V, f=1MHz		700		pF
Output Capacitance	C _{oss}	V _{DS} =-20V, f=1MHz		110		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} =-20V, f=1MHz		40		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		25		ns
Rise Time	t _r	See specified Test Circuit.		28		ns
Turn-OFF Delay Time	t _{d(off)}	See specified Test Circuit.		160		ns
Fall Time	t _f	See specified Test Circuit.		55		ns
Diode Forward Voltage	V _{SD}	I _S =-2A, V _{GS} =0V			-1.5	V
Diode Reverse Recovery Time	t _{rr}	I _S =-2A, di / dt=100A / μs		120	155	ns

Marking : J458

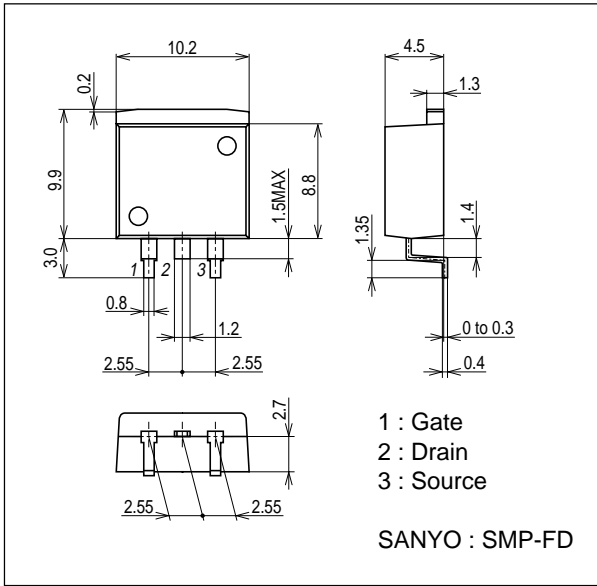
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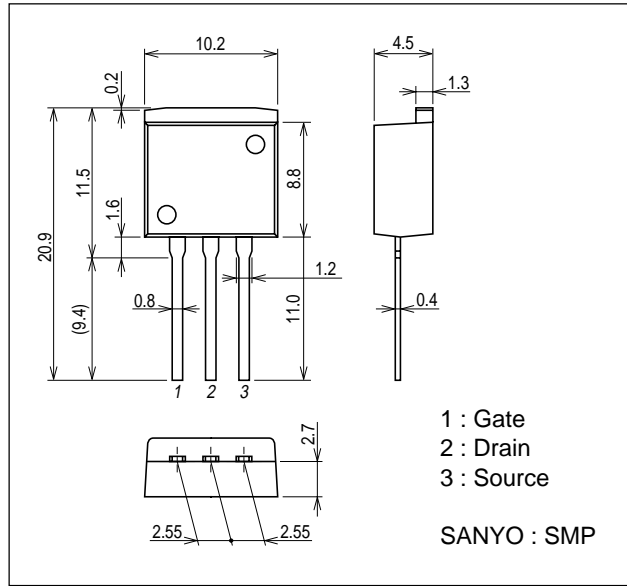
Package Dimensions

unit : mm (typ)
7001-003

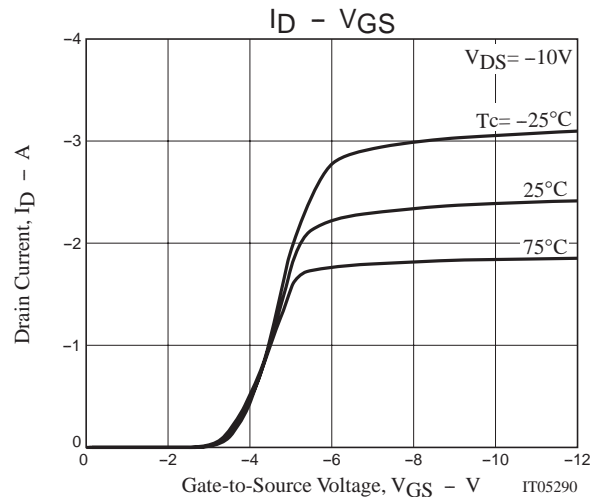
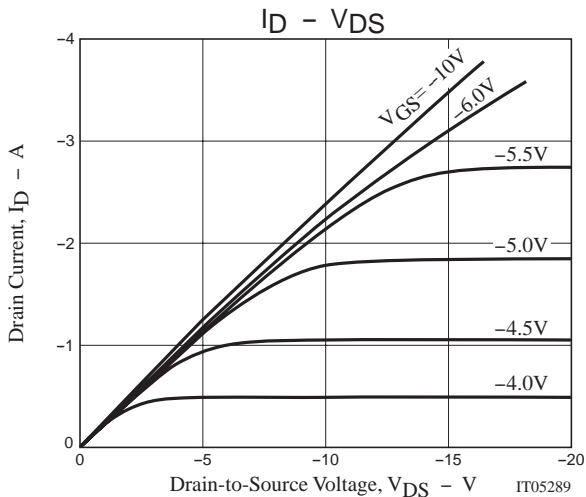
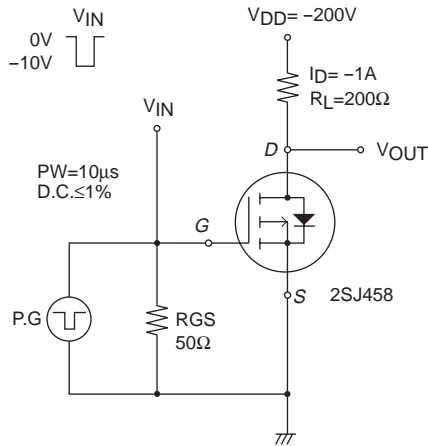


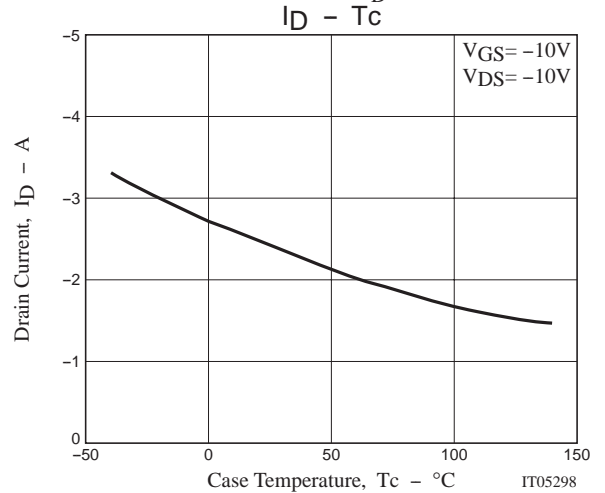
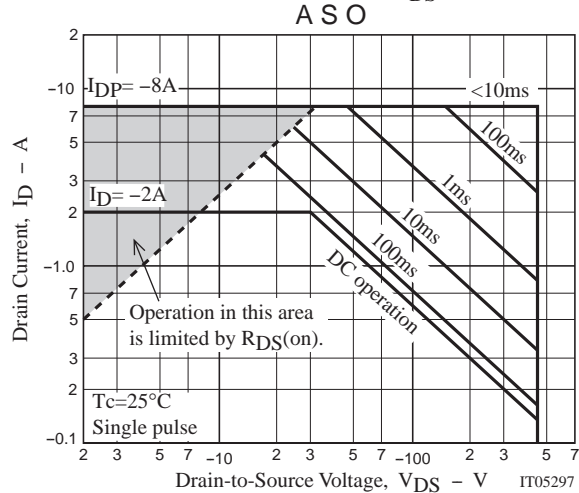
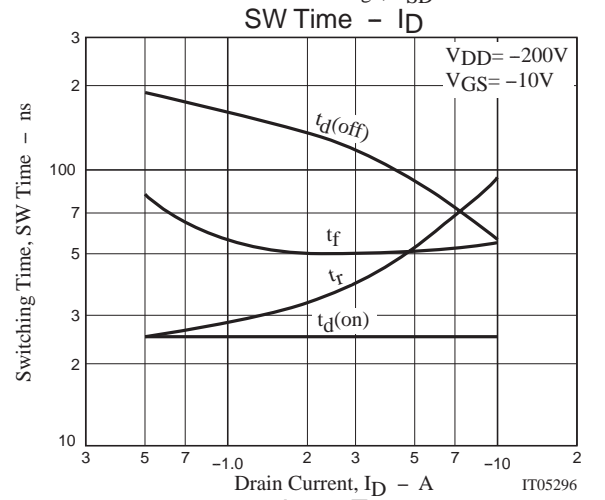
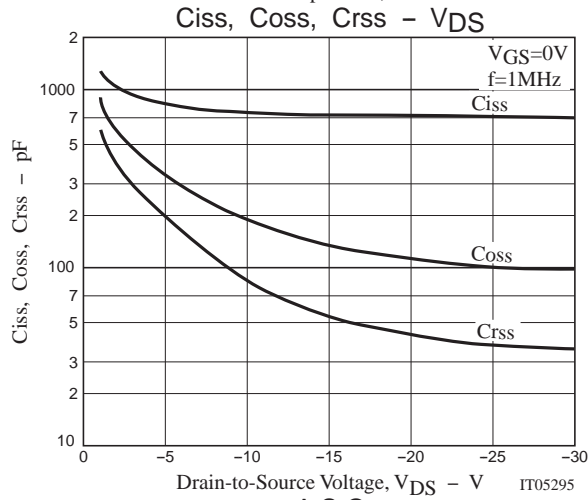
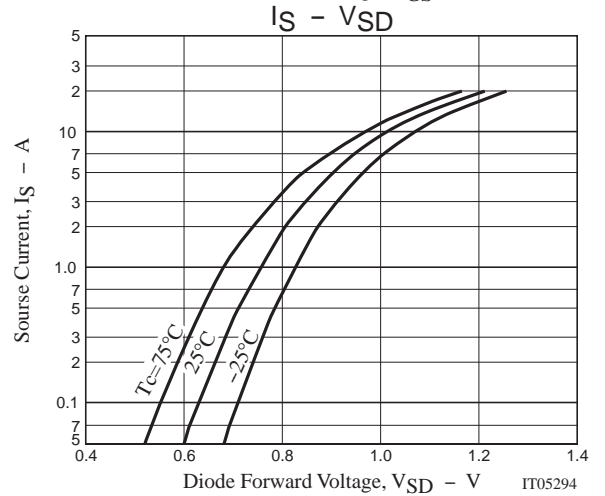
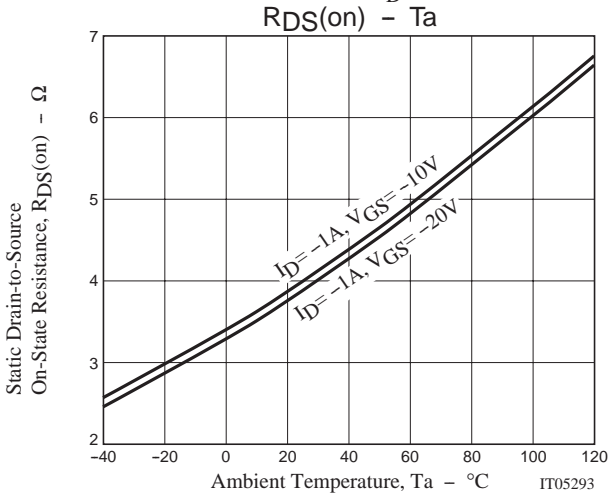
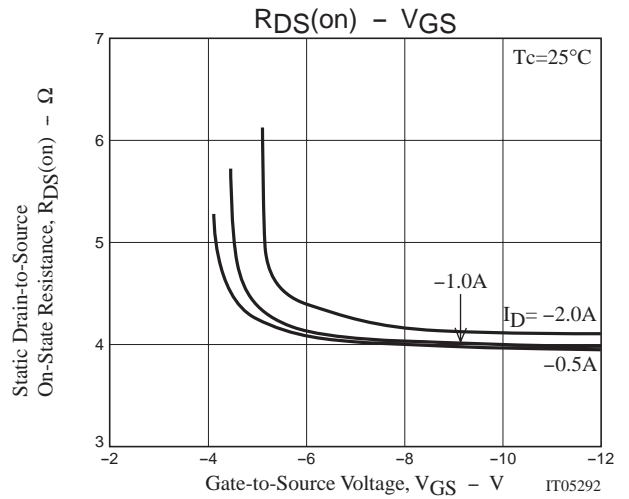
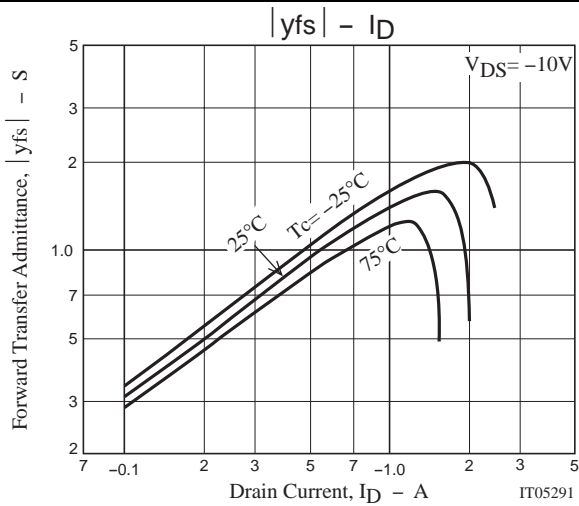
Package Dimensions

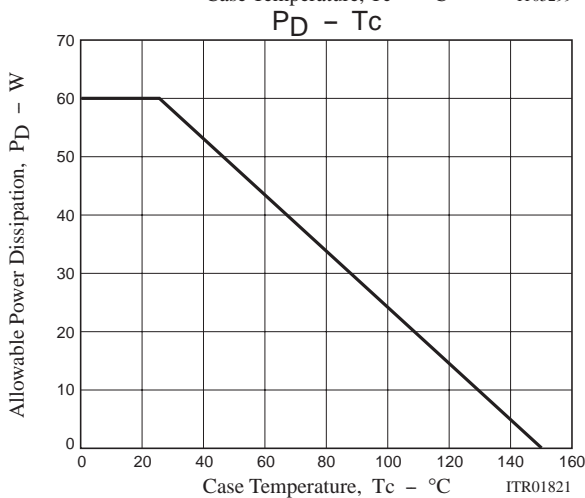
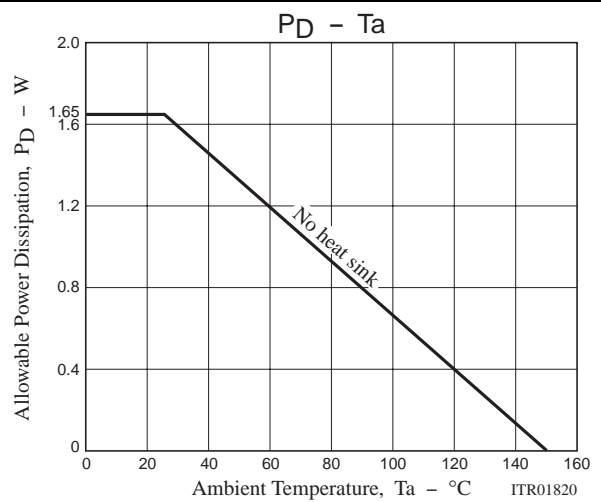
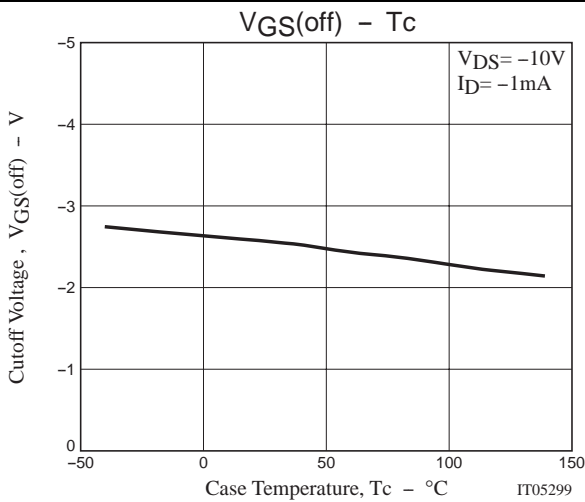
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Switching Time Test Circuit







Note on usage : Since the 2SJ458 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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