Ordering number : EN8602

SANYO Semiconductors
DATA SHEET

N-Channel Silicon MOSFET

2SK2403 — General-Purpose Switching Device Applications

Features

- Built-in FRD.
- 10V drive.

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		3	A
Drain Current (Pulse)	I_{DP}	PW≤10μs, duty cycle≤1%	12	A
Allowable Power Dissipation	P_D		1.65	W
		Tc=25°C	50	W
Channel Temperature	Tch		150	°C
Storage Temperature	Tstg		−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}=0V	450			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=450V, 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	$\|yfs\|$	V_{DS}=10V, I_D=1.5A	0.8	1.5		S
Static Drain-to-Source On-State Resistance	$R_{DS(on)}$	I_D=1.5A, V_{GS}=10V		2.4	3.2	Ω
Input Capacitance	Ciss	V_{DS}=20V, f=1MHz		380		pF
Output Capacitance	Coss	V_{DS}=20V, f=1MHz		60		pF
Reverse Transfer Capacitance	Crss	V_{DS}=20V, f=1MHz		20		pF

Continued on next page.

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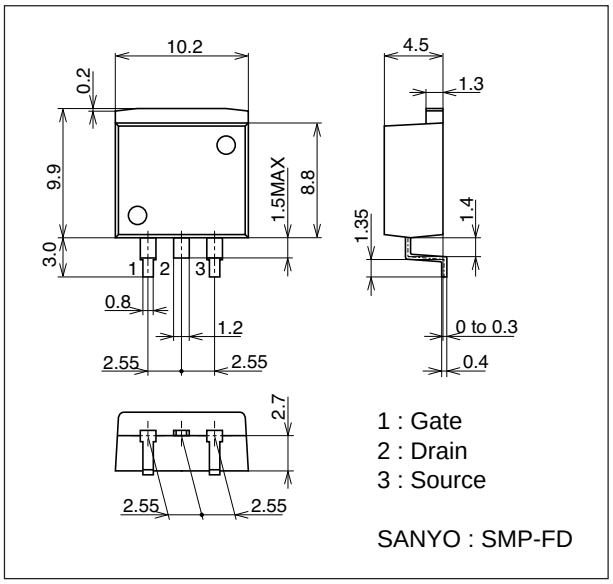
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Turn-ON Delay Time	t_{d}(on)	See specified Test Circuit.		10		ns
Rise Time	t_{r}	See specified Test Circuit.		20		ns
Turn-OFF Delay Time	t_{d}(off)	See specified Test Circuit.		75		ns
Fall Time	t_{f}	See specified Test Circuit.		30		ns
Diode Forward Voltage	V_{SD}	I_S=3A, V_{GS}=0V			1.5	V
Diode Reverse Recovery Time	t_{rr}	I_S=3A, di / dt=100A / μs		100	130	ns

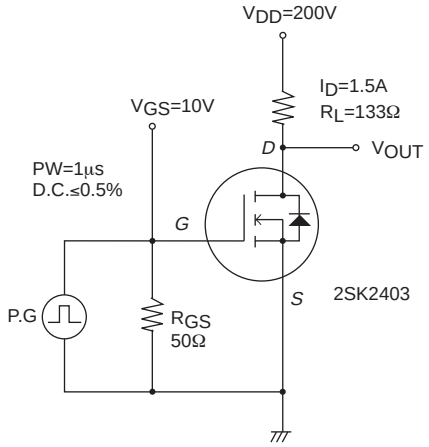
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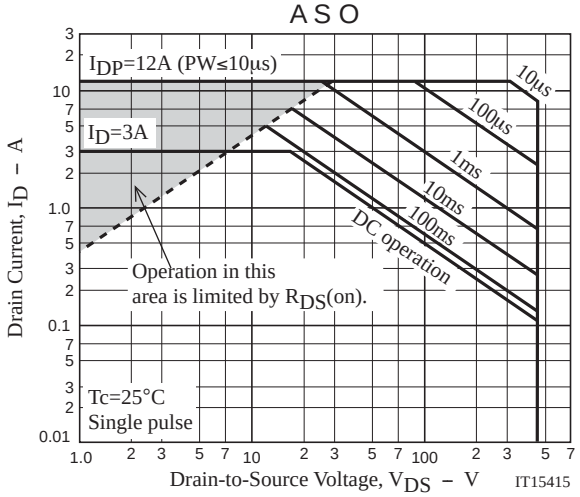
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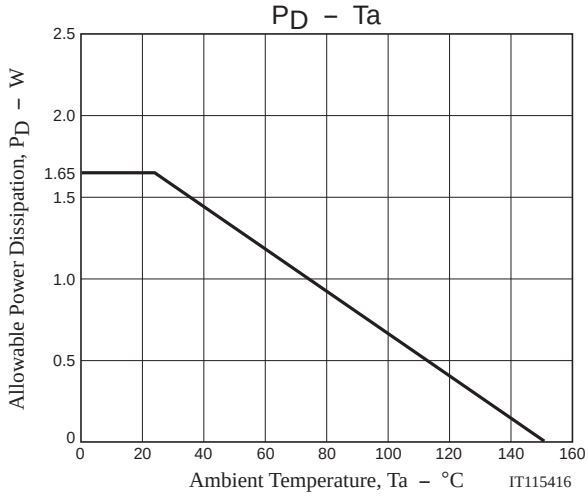
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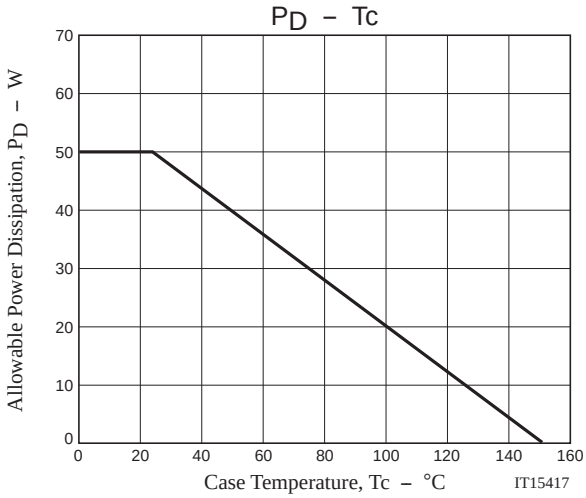


Switching Time Test Circuit









Note on usage : Since the 2SK2403 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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