

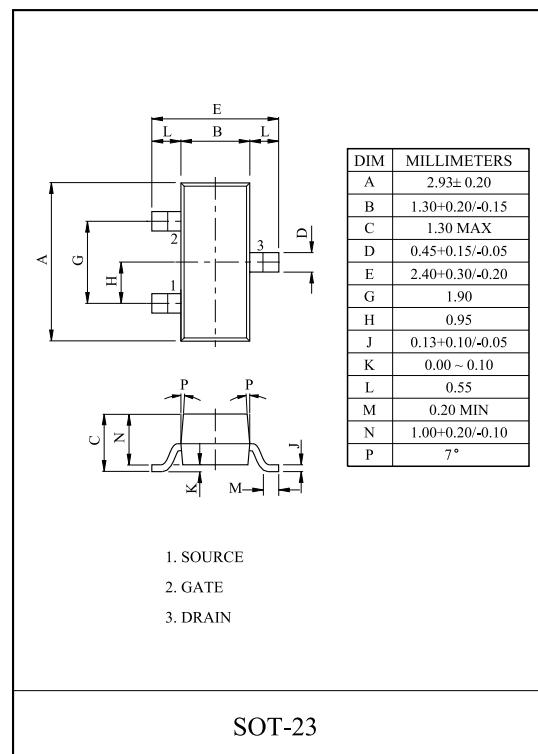
INTERFACE AND SWITCHING APPLICATION.

FEATURES

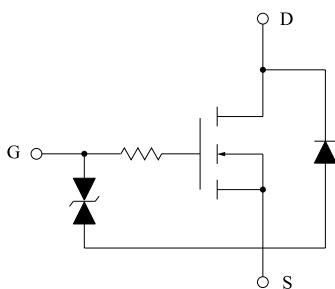
- High density cell design for low $R_{DS(ON)}$.
- Voltage controlled small signal switch.
- Rugged and reliable.
- High saturation current capability.

MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Drain-Source Voltage		V_{DSS}	60	V
Drain-Gate Voltage ($R_{GS} \leq 1 \text{ M}\Omega$)		V_{DGR}	60	V
Gate-Source Voltage		V_{GSS}	± 20	V
Drain Current	Continuous	I_D	115	mA
	Pulsed	I_{DP}	800	
Drain Power Dissipation		P_D	200	mW
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55 ~ 150	°C

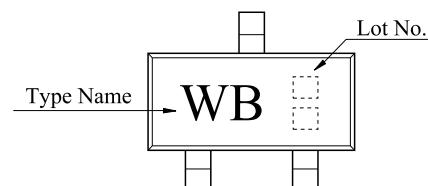


EQUIVALENT CIRCUIT



THIS TRANSISTOR IS ELECTROSTATIC SENSITIVE DEVICE.
PLEASE HANDLE WITH CAUTION.

Marking



ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V, I_D=10\mu A$	60	-	-	V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=60V, V_{GS}=0V$	-	-	1	μA
Gate-Body Leakage, Forward	I_{GSSF}	$V_{GS}=20V, V_{DS}=0V$	-	-	1	μA
Gate-Body Leakage, Reverse	I_{GSSR}	$V_{GS}=-20V, V_{DS}=0V$	-	-	-1	μA

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ELECTRICAL CHARACTERISTICS (Ta=25 °C) ON CHARACTERISTICS (Note 1)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Threshold Voltage	V _{th}	V _{DS} =V _{GS} , I _D =250μA	1	2.1	2.5	V
Drain-Source ON Resistance	R _{DS(ON)}	V _{GS} =10V, I _D =500mA	-	1.8	5	Ω
		V _{GS} =5V, I _D =50mA	-	-	5	
Drain-Source ON Voltage	V _{DS(ON)}	V _{GS} =10V, I _D =500mA	-	0.6	1.0	V
		V _{GS} =5V, I _D =50mA	-	0.09	0.2	
On State Drain Current	I _{D(ON)}	V _{GS} =10V, V _{DS} =≥2 V _{DS(ON)}	500	2700	-	mA
Forward Transconductance	g _{FS}	V _{DS} =2V _{DS(ON)} , I _D =200mA	80	320	-	mS

Note 1) Pulse Test : Pulse Width ≤300μs, Duty Cycle ≤2.0%

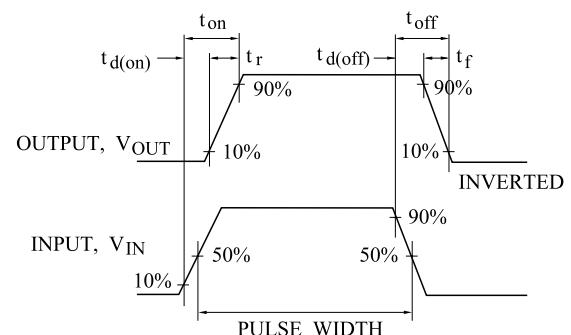
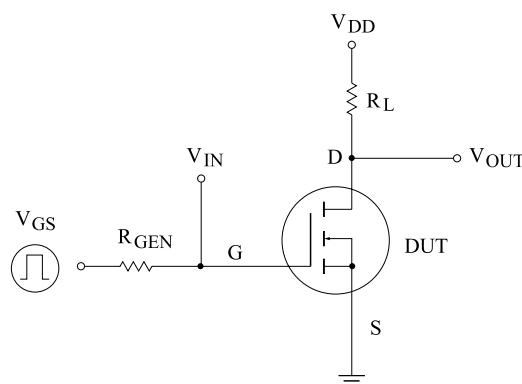
DYNAMIC CHARACTERISTICS

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Input Capacitance	C _{iss}	V _{DS} =25V, V _{GS} =0V, f=1MHz	-	20	50	pF	
Reverse Transfer Capacitance	C _{rss}		-	4	5		
Output Capacitance	C _{oss}		-	11	25		
Switching Time	Turn-On Time	t _{on}	V _{DD} =30V, R _L =150 Ω, I _D =200mA, V _{GS} =10V, R _{GEN} =25 Ω	-	-	20	nS
	Turn-Off Time	t _{off}		-	-	20	

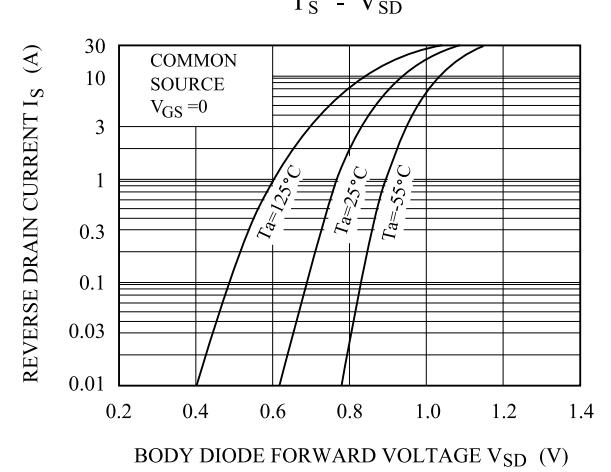
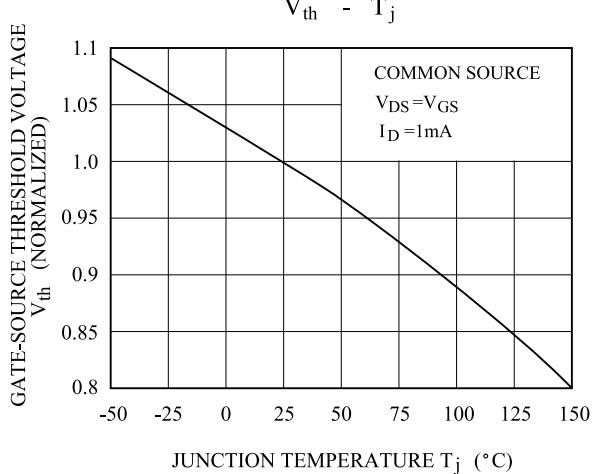
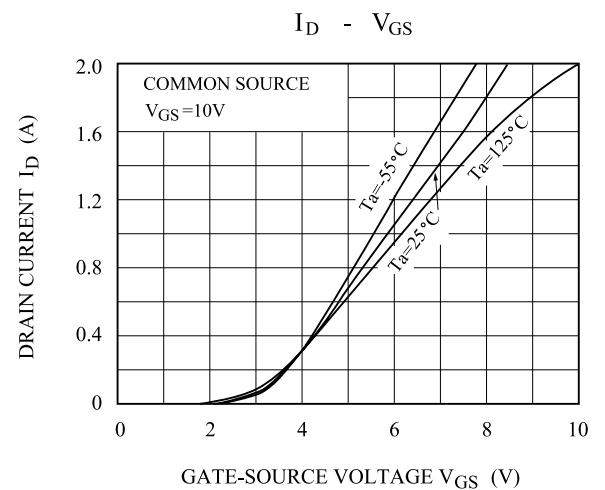
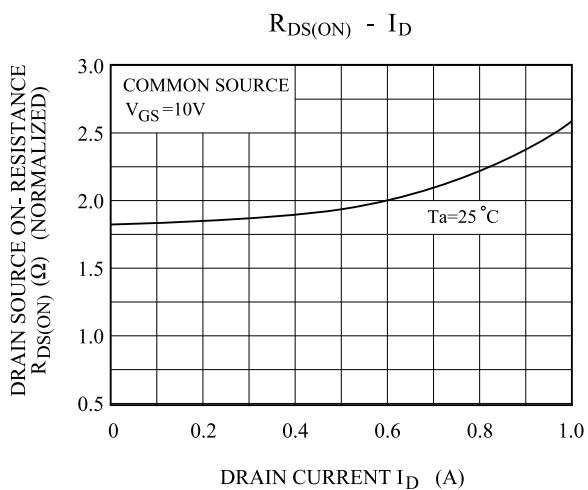
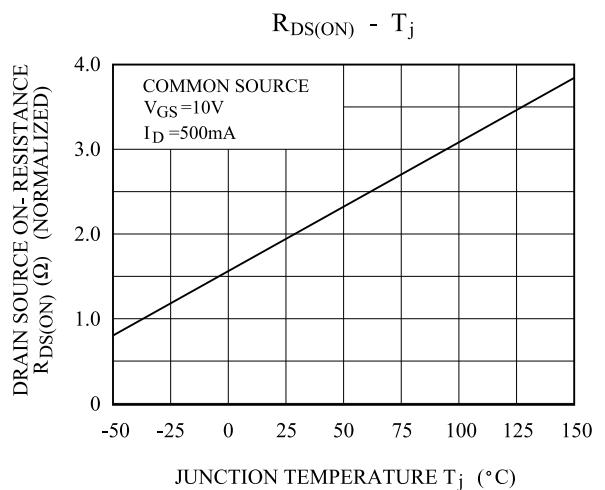
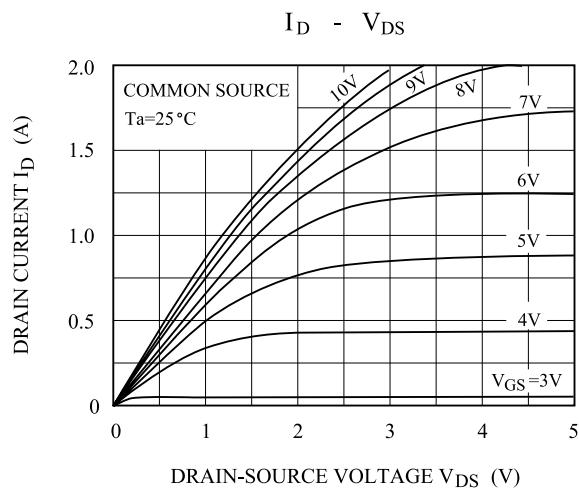
DRAIN-SOURCE DIODE CHARACTERISTICS AND MAXIMUM RATING

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Maximum Continuous Drain-Source Diode Forward Current	I _S	-	-	-	115	mA
Maximum Pulsed Drain-Source Diode Forward Current	I _{SM}	-	-	-	800	mA
Drain-Source Diode Forward Voltage	V _{SD}	V _{GS} =0V, I _S =115mA (Note1)	-	0.88	1.5	V

SWITCHING TIME TEST CIRCUIT



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