

Rev.A Jun.-2023

TO-252 3 引脚 N 沟道 MOSFET

N-CHANNEL MOSFET in a TO-252 Plastic Package.

$V_{DS} (V) = 100V$ $I_D = 37A (V_{GS}$

主要参数

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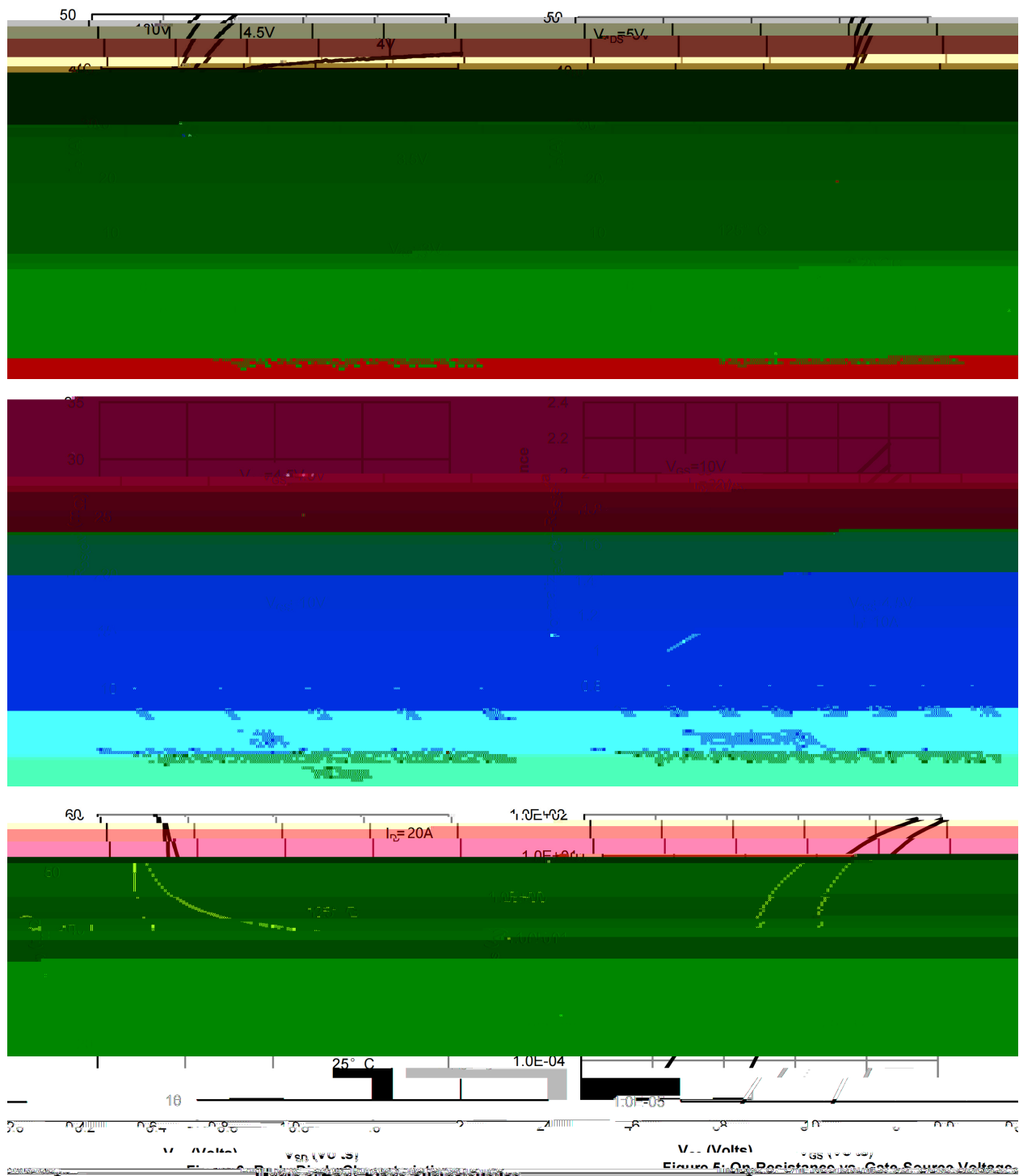
@ f Parameter		... Z Symbol	f > Rating	% y Unit
Drain-Source Voltage		V _{DSS}	100	V
Drain Current		I _D (T _c =25 °C)	37	A
Drain Current - Pulsed		I _{DM}	117	A
Gate-Source Voltage		V _{GS}	±20	V
Avalanche Current		I _{AS}	7	A
Single Pulsed Avalanche Energy		E _{AS}	14.4	mJ
Power Dissipation		P _D (T _c =25 °C)	68	W
Storage Temperature Range		T _{stg}	-55 ~ 150	
Thermal Resistance-Junction to Ambient	t = 0 ~ 10s	R _{θJA}	20	/W
	Steady-State		50	
Thermal Resistance-Junction to Case	Steady-State	R _{θJC}	1.84	

其他参数

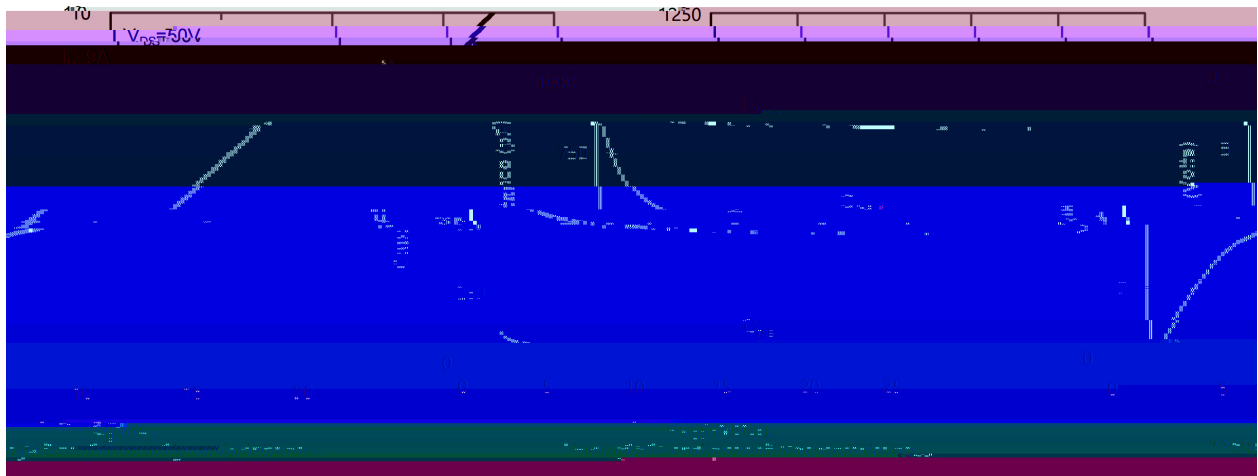
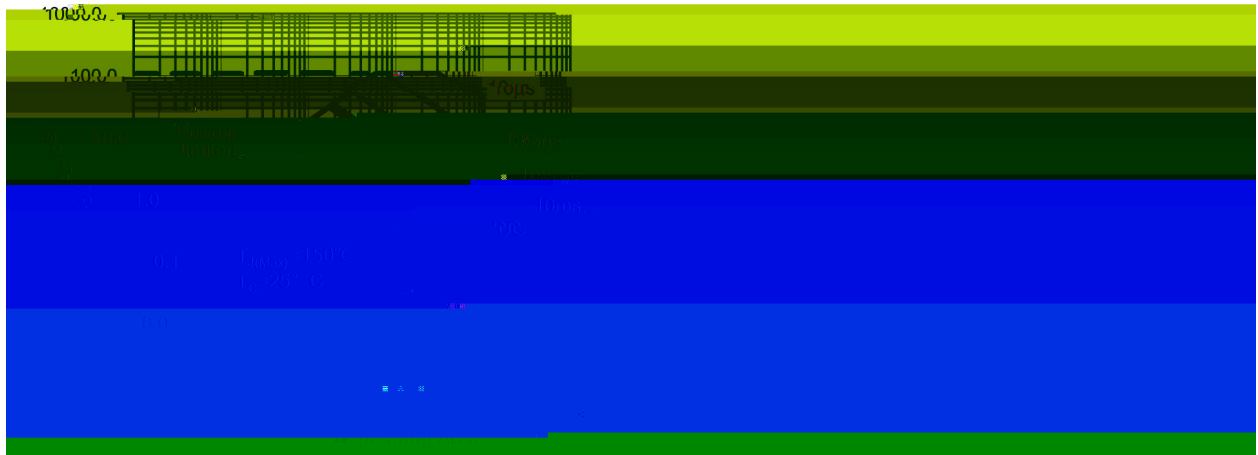
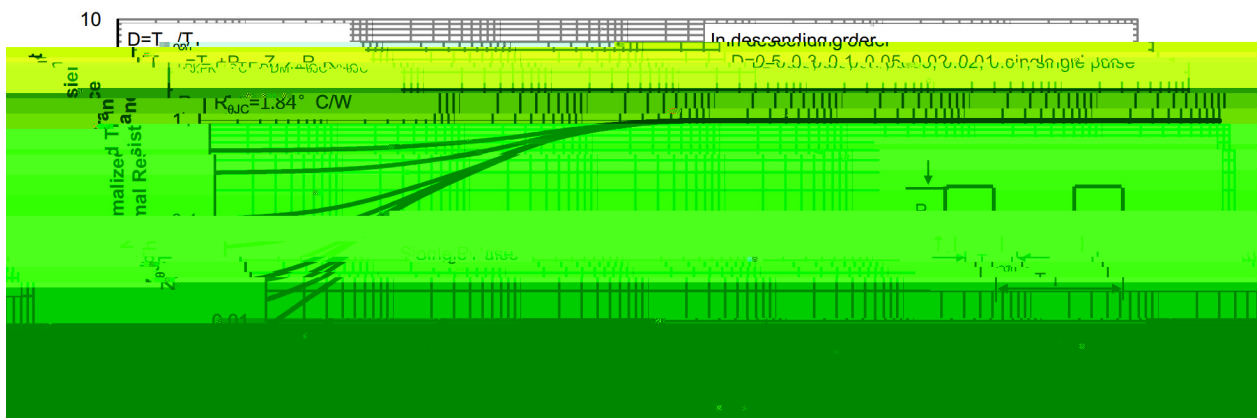
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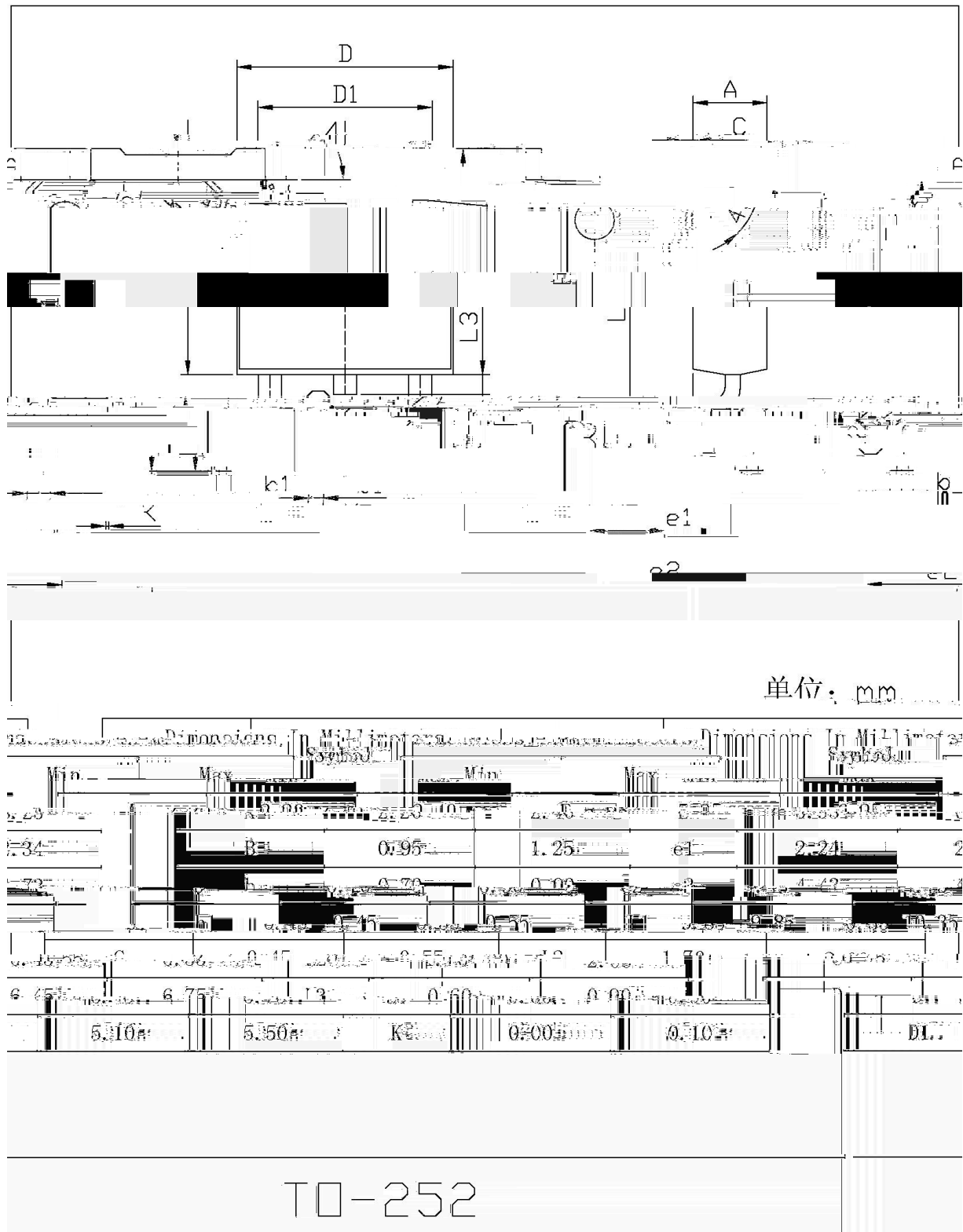
@ f Parameter	... Z Symbol	y i Ú ^ Test Conditions	Â 4 > Min	Á ° > Typ	Â Ý > Max	% y Unit
Drain-Source Breakdown Voltage	BV _{DSS}	V _{GS} =0V I _D =250 A	100	109		V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =100V V _{GS} =0V			1	A
Gate-Body Leakage Current Forward	I _{GSS}	V _{GS} =±20V V _{DS} =0V			±0.1	A
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} I _D =250 A	1.0	1.6	2.5	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =10V I _D =20A		20	25	m
		V _{GS} =4.5V I _D =10A		25	35	m
Drain-Source Diode Forward Voltage	V _{SD}	V _{GS} =0V I _S =1A			1.2	V
Input Capacitance	C _{iss}	V _{DS} =25V V _{GS} =0V f=1.0MHz		820		pF
Output Capacitance	C _{oss}			475		
Reverse Transfer Capacitance	C _{rss}			35		
Gate resistance	R _g	V _{GS} =0V V _{DS} =0V f=1MHz		1.9		
Total Gate Charge	Q _{g(10V)}	V _{GS} =10V V _{DS} =50V I _D =9A		17		nC
Total Gate Charge	Q _{g(4.5V)}			9		
Gate Source Charge	Q _{gs}			3		
Gate Drain Charge	Q _{gd}			3.5		

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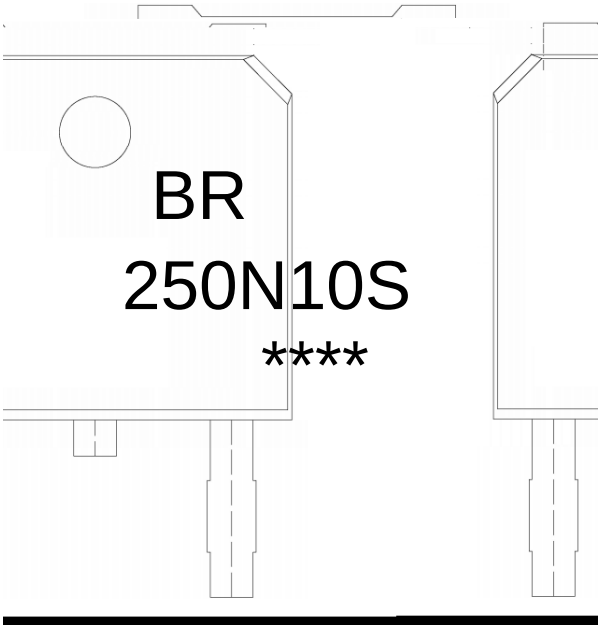


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Note:
BR: Company Code
250N10S: Product Type Code
****: Lot No. Code, code change with Lot No

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