/ Descriptions

TO-252 ĻĻĿ N ঌ MOS ʃ ѽ Ẓ ٦
N-CHANNEL MOSFET in a TO-252 Plastic Package.

/ Features

V_{DS}(V) = 20V I_D=65A(V_{GS} = 12V)
$R_{DS(ON)}$@4.5V 8mƑ(Typ. 5mƑ)
$R_{DS(ON)}$@2.5V 10mƑ(Typ. 6.2mƑ)
ṇ ғ β HF Product.

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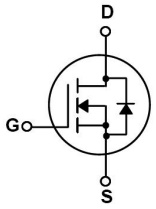
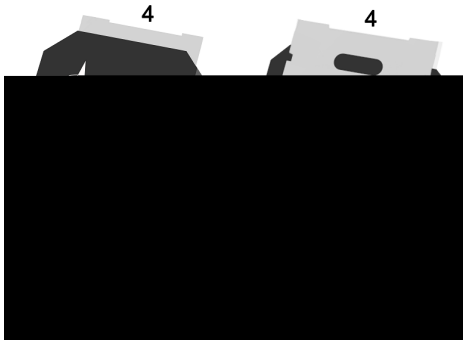
These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.





PIN1 χ G PIN 2 χ D PIN 3 χ S PIN 4 χ D

/ Marking

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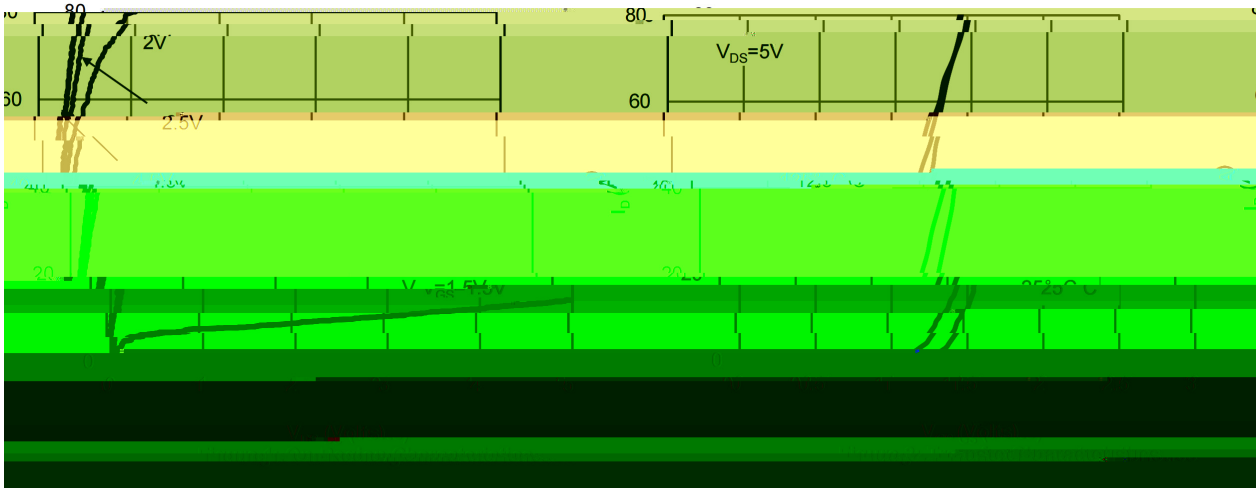
See Marking Instructions.

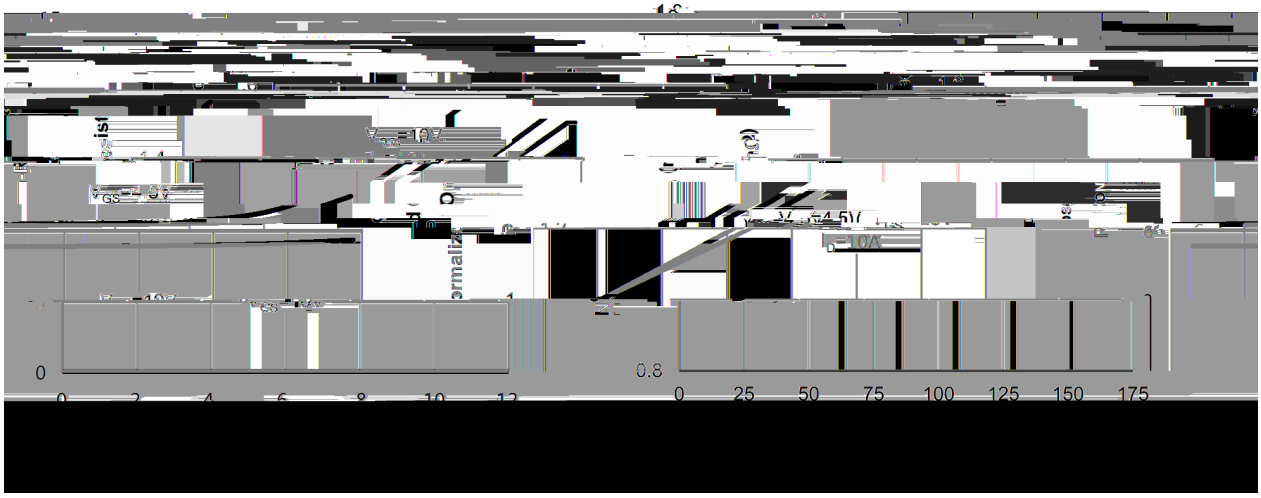
v ̈Ω Parameter		ϒ N Symbol	̈Ω Ö Rating	D Ч Unit
Drain-Source Voltage		V_{DSS}	20	V
Drain Current		I_D(Tc=25)	65	A
Peak Drain Current		I_{DM}	157	A
Gate-Source Voltage		V_{GSS}	12	V
Avalanche Current		I_{AS}	19	A
Single Pulsed Avalanche Energy		E_{AS}	361	mJ
Total Power Dissipation		P_D(Tc=25)	52	W
Junction and Storage Temperature Range		T_J,T_{STG}	-55 to 150	
Thermal resistance, junction - ambient	t 10s	$R_{\theta JA}$	20	/W
	Steady-State		50	
Thermal resistance, junction - case	Steady-State	$R_{\theta JC}$	1.55	

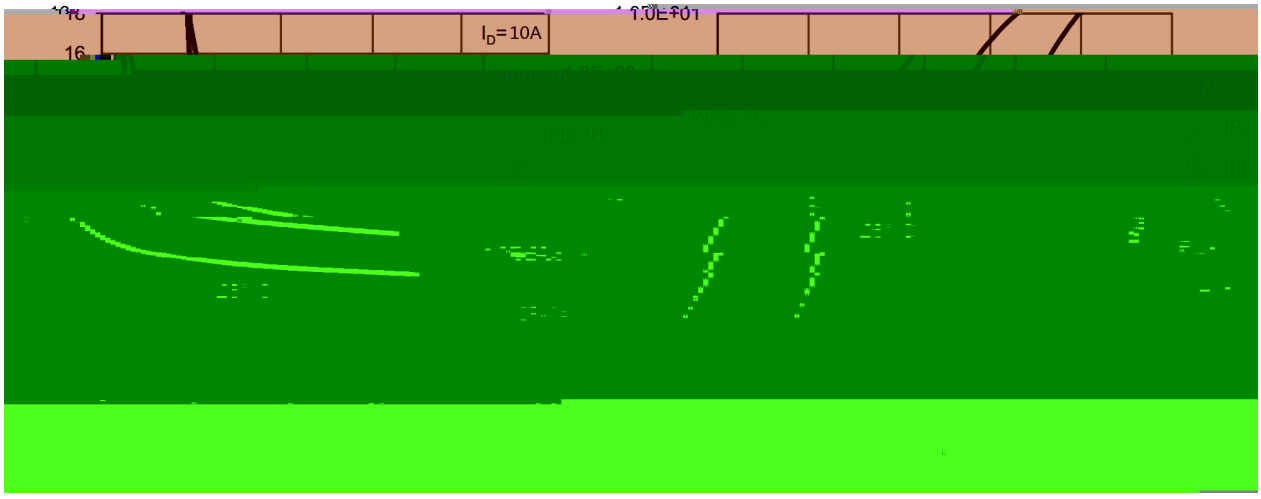
v ̈Ω Parameter	ϒ N Symbol	╨ ⁝ ┆ ţ Test Conditions	ϣ ņ Ö Min	Ɛ ʒ Ö Typ	ϣ ᶻ Ö Max	D Ч Unit

v ˝Ω Parameter	ϒ ᴺ Symbol	╜ ⁝ˈ ţ Test Conditions	ѡ ṇ Ө Min	Ɛ ȝ Ө Typ	ѡ ᶻ Ө Max	ᴅ Ꮋ Unit
Total Gate Charge	Q_g	V_{GS}=4.5V, V_{DS}=10V, I_D=18A		14.7		nC
Gate Source Charge	Q_{gs}			1.9		
Gate Drain Charge	Q_{gd}			4.7		
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=4.5V V_{DS}=10V R_L=0.75Ω R_{GEN}=3Ω		13		ns
Turn-On Rise Time	t_r			23		ns
Turn-Off Delay Time	$t_{d(of}$					

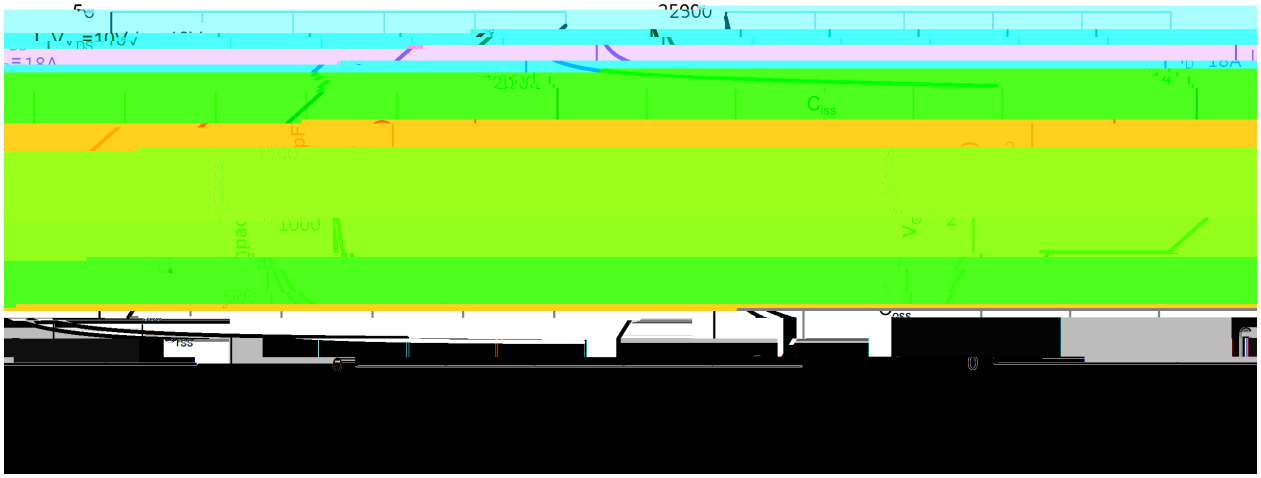
/ Electrical Characteristic Curve

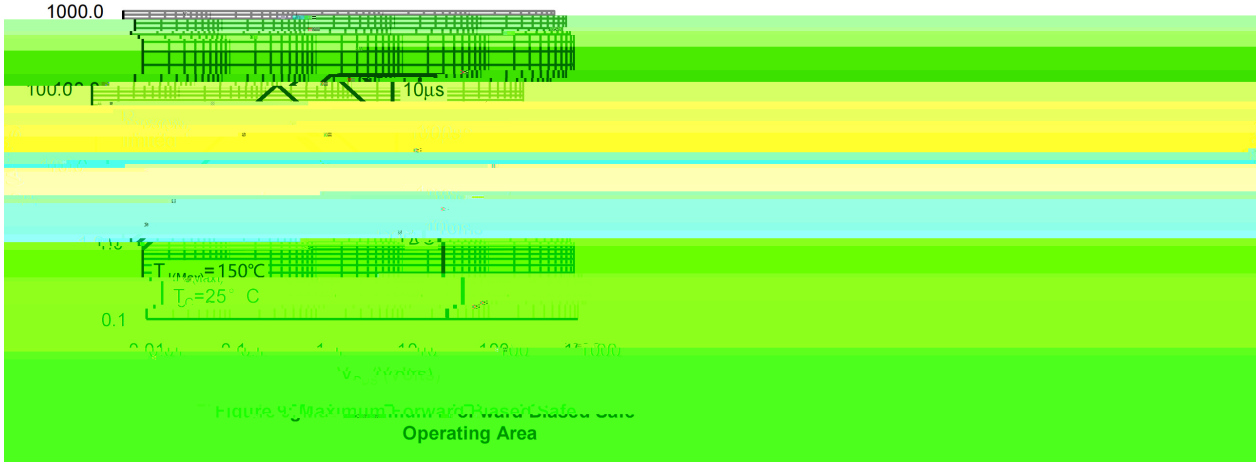




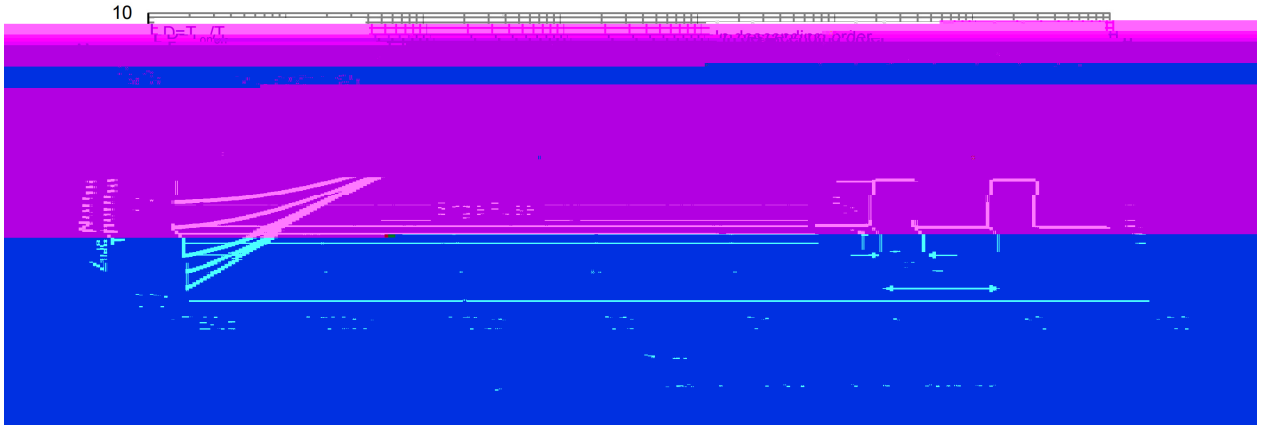


/ Electrical Characteristic Curve

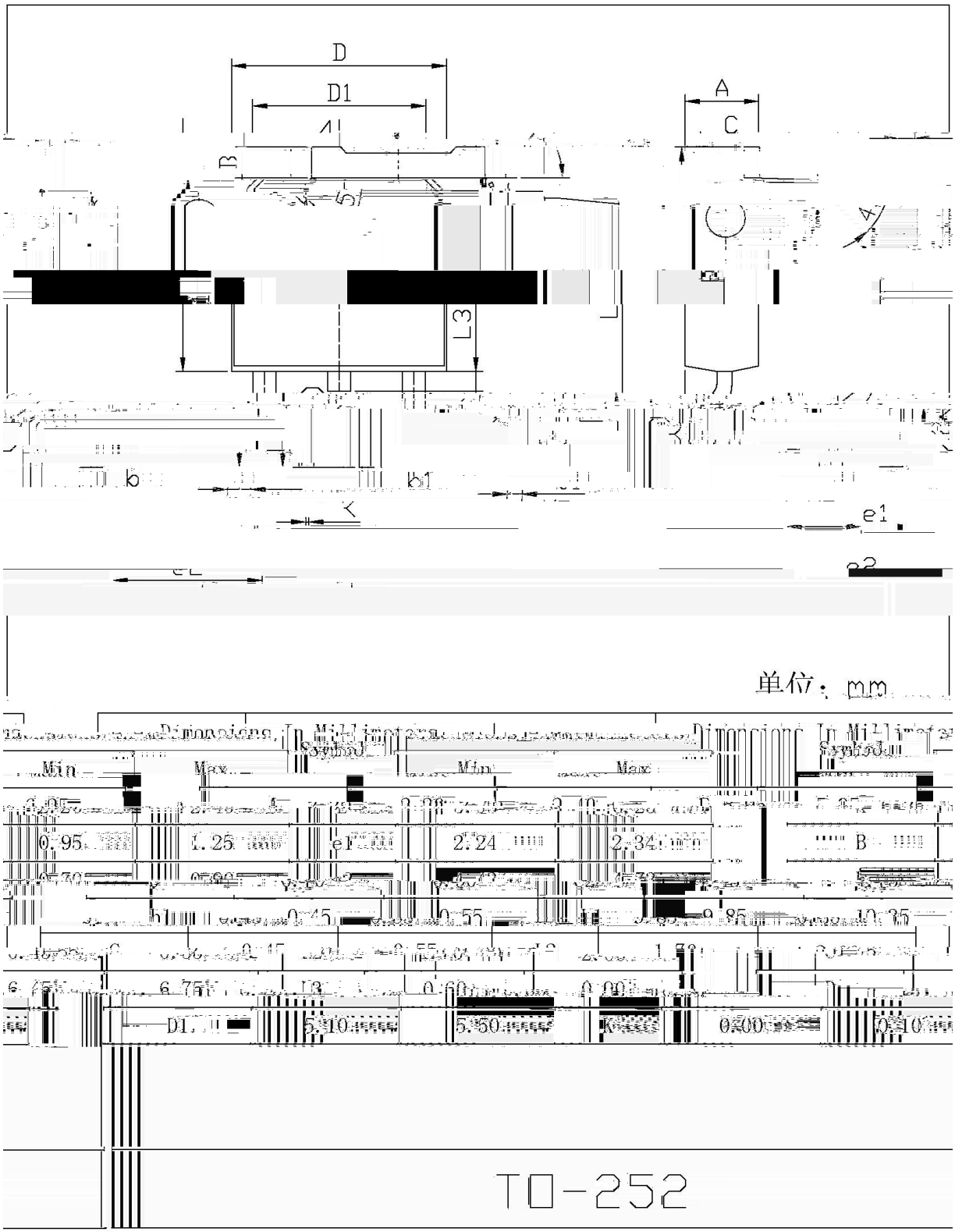




Operating Area



/ Package Dimensions



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