TO-220 ṂṂ Ŀ N ێ MOS ʃ ᾦ Ẕ ˥ N-CHANNEL MOSFET in a TO-220 Plastic Package.

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Low gate charge, low crss, fast switching.

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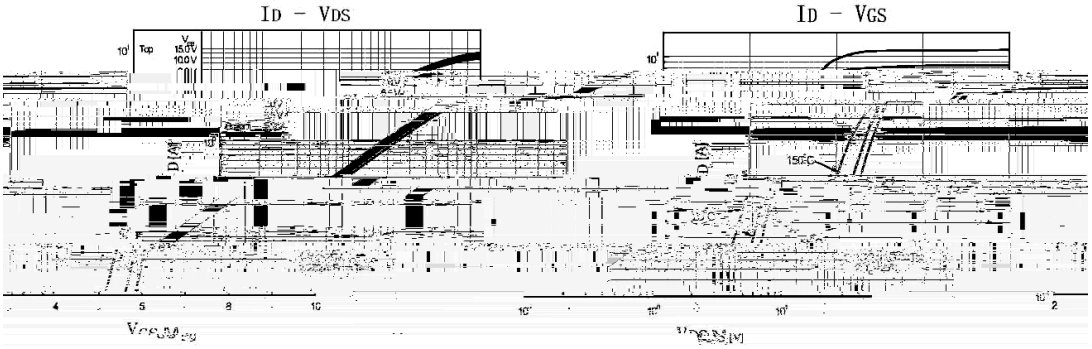
/ Absolute Maximum Ratings(Ta=25)

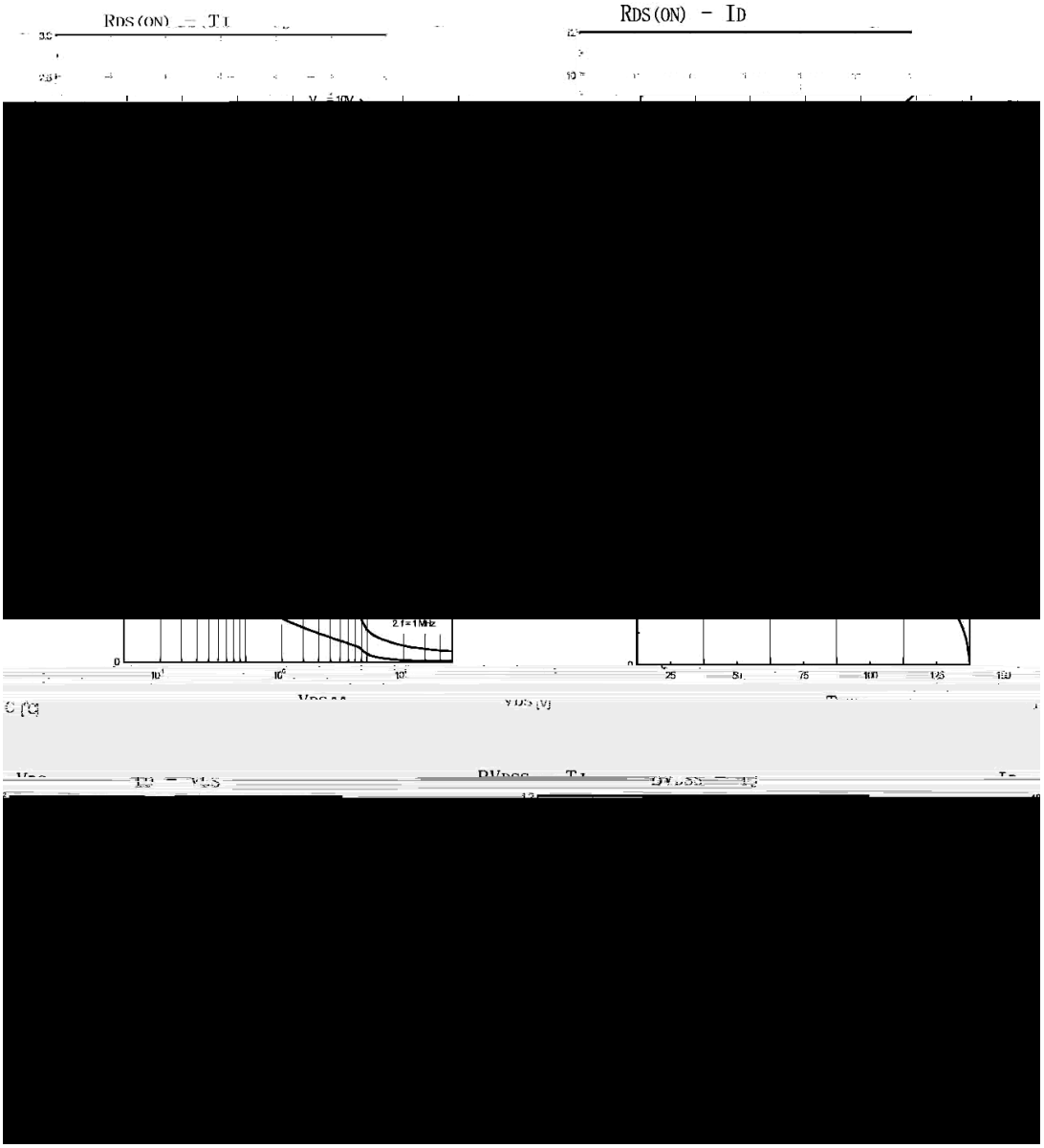
v ̈Ω̣ Parameter	ɬ N Symbol	̈Ω̣Ö Rating	D Ɉ Unit
Drain-Source Voltage	V_{DSS}	600	V
Drain Current	I_D(Tc=25)	4.0	A
	I_D(Tc=100)	2.5	A
Drain Current - Pulsed	I_{DM}	16	A
Gate-Source Voltage	V_{GSS}	±30	V
Single Pulsed Avalanche Energy	E_{AS}	240	mJ
Repetitive Avalanche Energy	E_{AR}	10	mJ
Avalanche Current	I_{AR}	4.0	A
Power Dissipation	P_D(Tc=25)	100	W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to 150	

/ Electrical Characteristics(Ta=25)

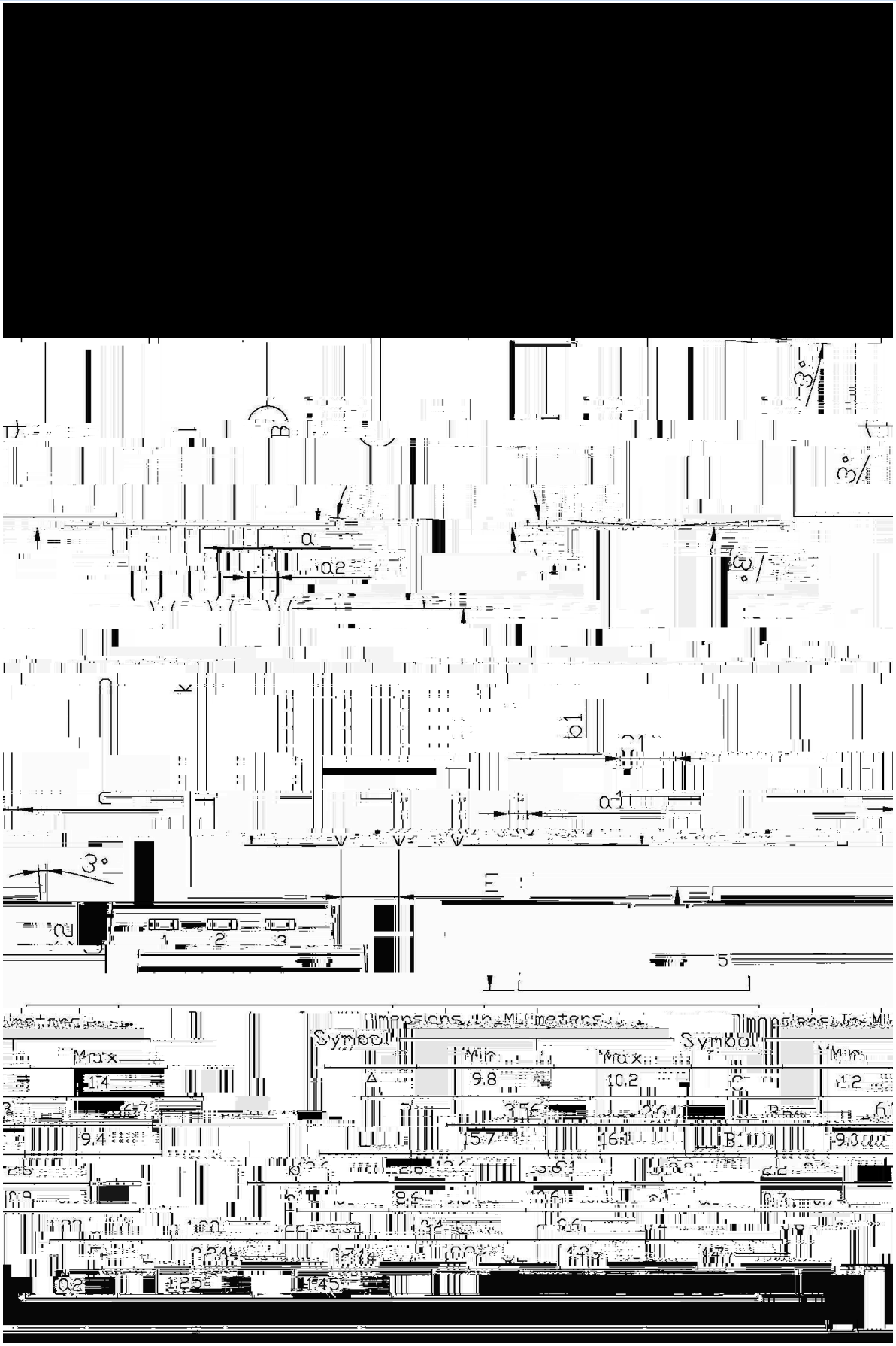
v ̈Ω̣ Parameter	ɬ N Symbol	⊥⊥ ;ǂ ʈ Test Conditions		ω̣ ṇ Ö Min	Ɛ ʒ Ö Typ	ω̣ ʑ Ö Max	D Ɉ Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V	I_D=250μA	600			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=600V	V_{GS}=0V			10	μA
		V_{DS}=480V	T_C=125			100	μA
Gate-Body Leakage Current, Forward	I_{GSS}	V_{GS}=±30V	V_{DS}=0V			±0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS}	I_D=250μA	2.0		4.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V	I_D=2.0A		2.0	2.5	Ω
Forward Transconductance	g_{FS}	V_{DS}=40V	I_D=2.0A		4.7		S
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS}=0V	I_S=4.0A			1.4	V
Input Capacitance	C_{iss}	V_{DS}=25V f=1.0MHz	V_{GS}=0V		545	710	pF
Output Capacitance	C_{oss}				60	80	pF
Reverse Transfer Capacitance	C_{rss}				8	11	pF
Turn-On Delay Time	$t_{d(on)}$	V_{DD}=300V R_G=25Ω	I_D=4.0A		10	30	ns
Turn-On Rise Time	t_r				35	80	ns
Turn-Off Delay Time	$t_{d(off)}$				45	100	ns
Turn-Off Fall Time	t_f				40	90	ns

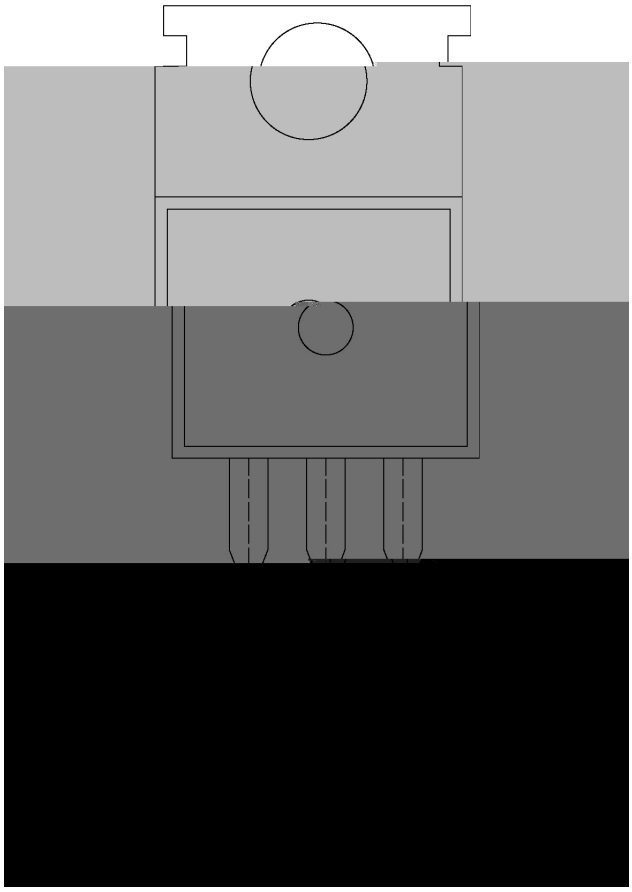
/ Electrical Characteristic Curve



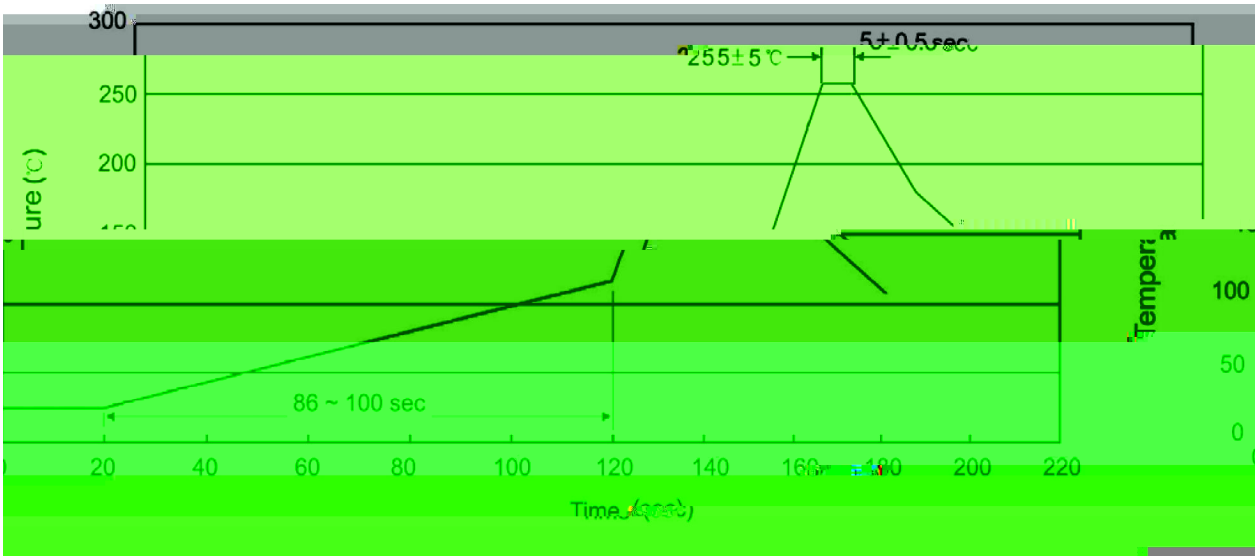


/ Package Dimensions





( ) / Temperature Profile for Dip Soldering(Pb-Free)



Note: