

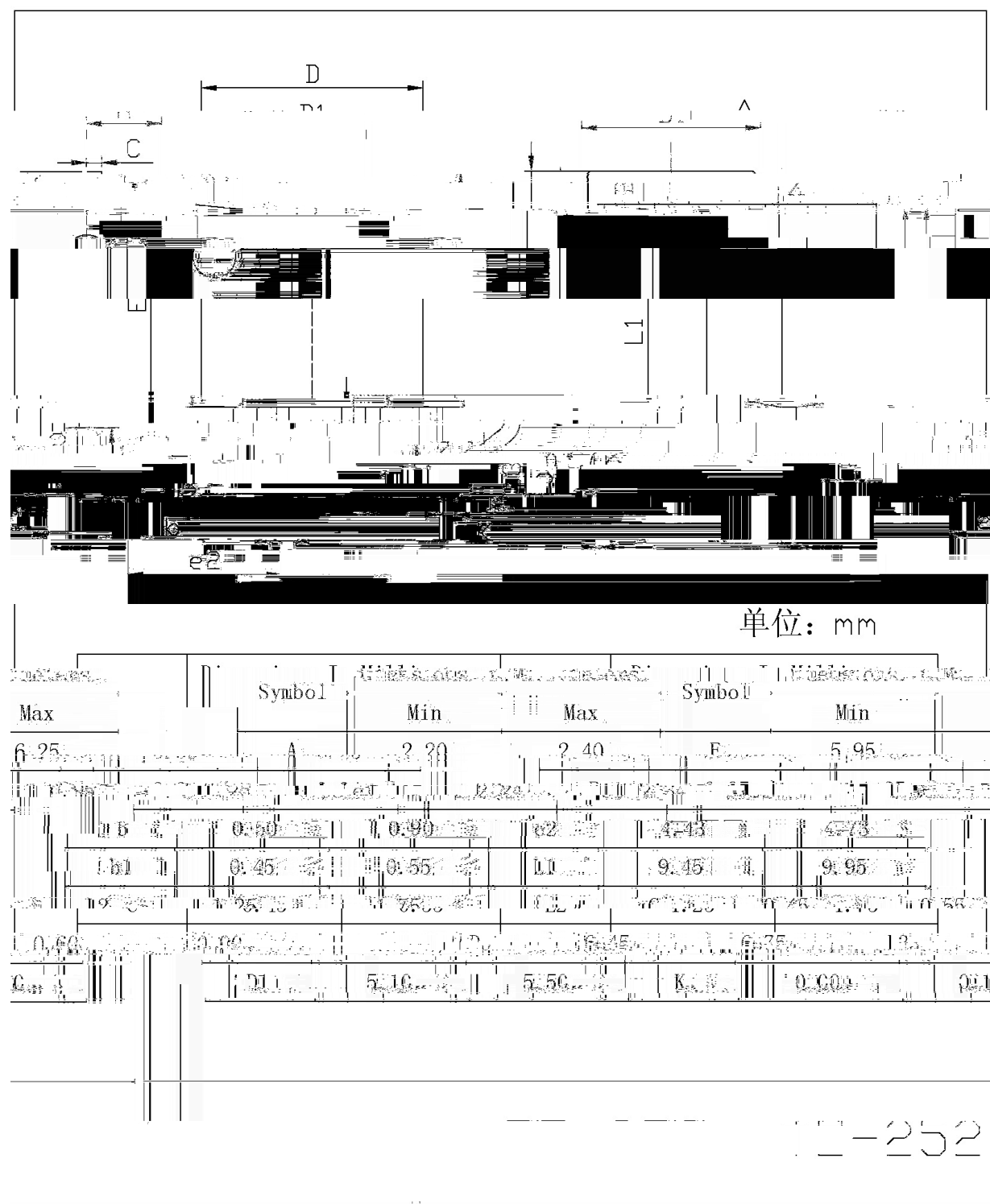
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	650	V
Drain Current	$I_D(T_C=25)$	2.0	A
Drain Current	$I_D(T_C=100)$	1.3	A
Drain Current - Pulsed	I_{DM}	6.0	A
Gate-Source Voltage	V_{GS}	± 30	V
Single Pulsed Avalanche Energy	E_{AS}	120	mJ
Repetitive Avalanche Energy	E_{AR}	5.4	mJ
Avalanche Current	I_{AR}	2.0	A
Power Dissipation	$P_D(T_C=25)$	37	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150	

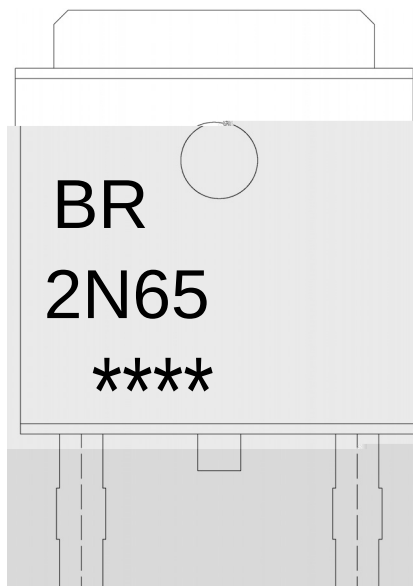
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DS}	$V_{GS}=0V$ $I_D=250\mu A$	650			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=650V$ $V_{GS}=0V$			1.0	μA
		$V_{DS}=480V$ $T_C=125$			100	μA
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 30V$ $V_{DS}=0V$			± 0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	2.0		4.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=1.0A$		4.3	6.5	Ω
Forward Transconductance	g_{FS}	$V_{DS}=40V$ $I_D=1.0A$		2.05		S
Drain-Source Diode Forward Voltage	V_{SD}	$V_{GS}=0V$ $I_S=2.0A$			1.4	V
Input Capacitance	C_{iss}	$V_{DS}=25V$ $V_{GS}=0V$ $f=1.0MHz$		320	420	pF
Output Capacitance	C_{oss}			35	46	pF
Reverse Transfer Capacitance	C_{rss}			4.5	6.0	pF
Turn-On Delay Time	$t_{d(on)}$	$V_{DD}=300V$ $I_D=2.0A$ $R_G=25\Omega$		8.0	30	ns
Turn-On Rise Time	t_r			23	60	ns
Turn-Off Delay Time	$t_{d(off)}$			25	60	ns
Turn-Off Fall Time	t_f			28	70	ns

/ Package Dimensions



/ Marking Instructions



BR

2N65

Note:

BR: Company Code

2N65: Product Type

****: Lot No. Code, code change with Lot No

