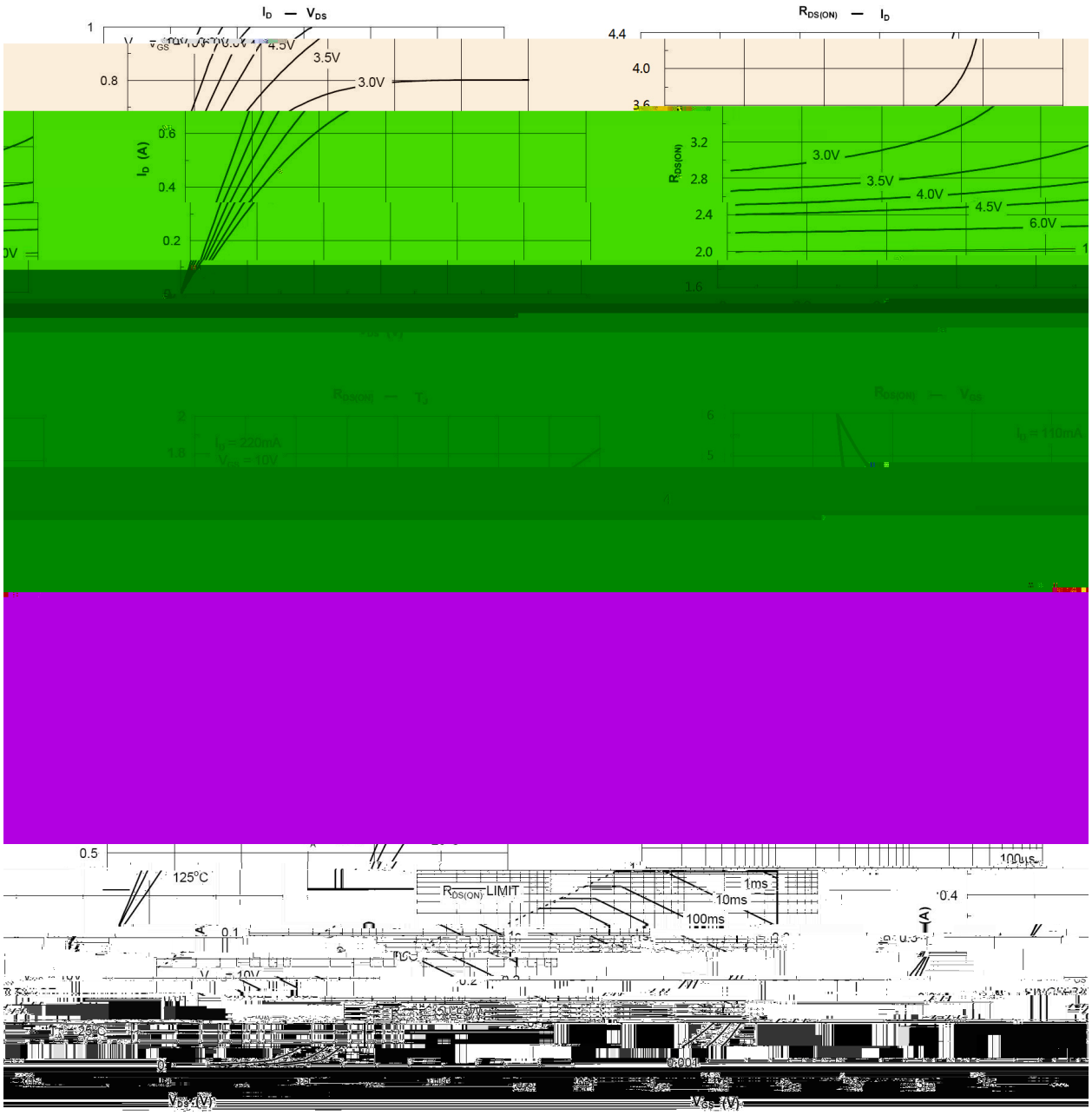
BSS138G

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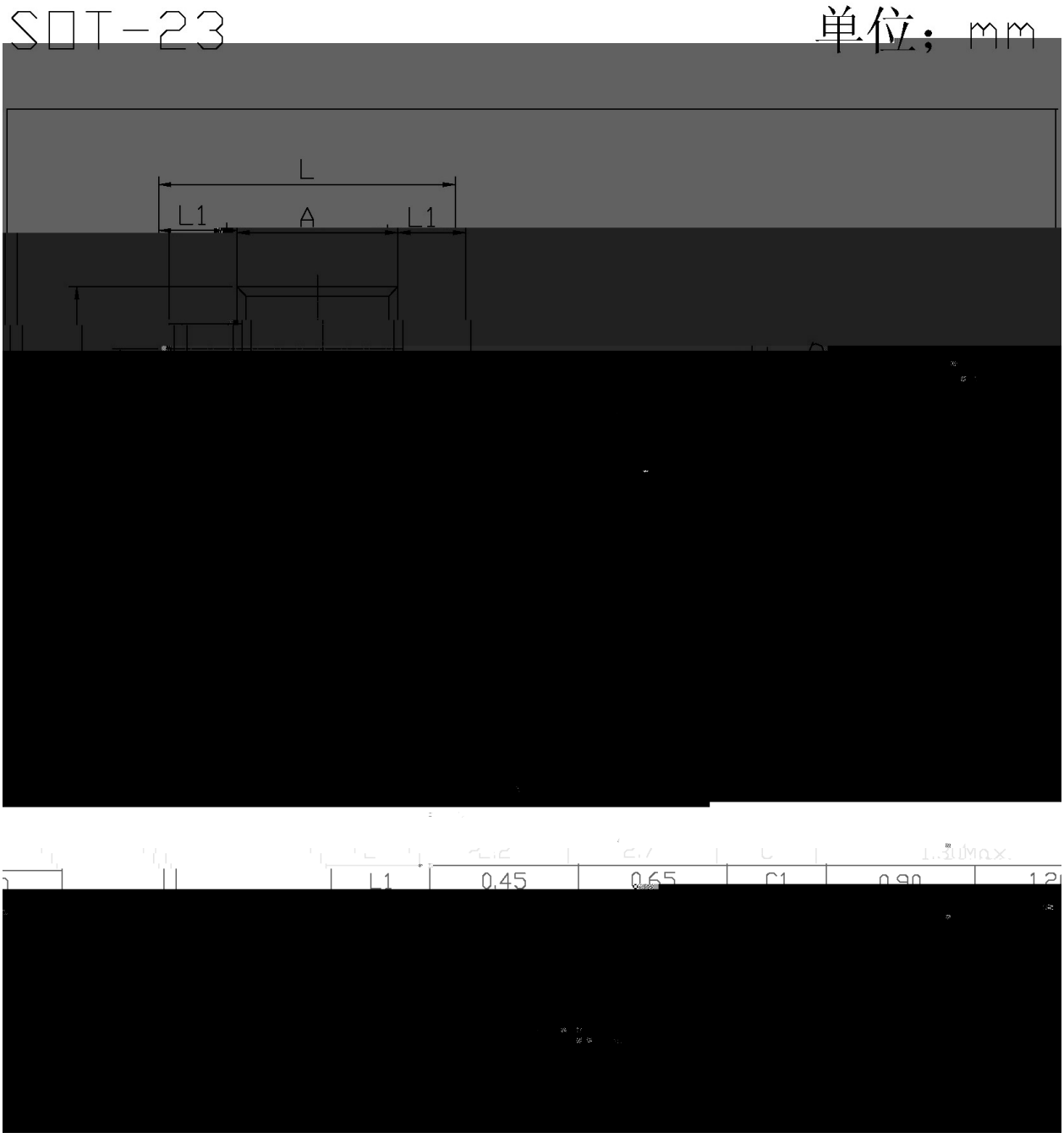
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	50	V
Gate-Source Voltage	V_{GSS}	±20	V
Drain Current – Continuous	I_D	220	mA
Peak Drain Current	I_{DM}	880	mA
Power Dissipation	P_D	360	mW
Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	350	/W
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Drain–Source Breakdown Voltage	V_{DSS}	V_{GS}=0V	I_D=250μA	50			V
Zero Gate Voltage Drain Current	$I_{DSS(1)}$	V_{GS}=0	V_{DS}=50V			0.5	μA
	$I_{DSS(2)}$	V_{GS}=0	V_{DS}=30V			0.1	μA
Gate–Body Leakage.	I_{GSS}	V_{DS}=0V	V_{GS}=±20			±10	μA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS}	I_D=1.0mA	0.8	1.6	2.2	V
Static Drain–Source On–Resistance	$R_{DS(on)(1)}$	V_{GS}=10V	I_D=220mA		1.9	3.5	Ω
	$R_{DS(on)(2)}$	V_{GS}=4.5V	I_D=220mA		2.5	6.0	Ω
Forward Transconductance	g_{FS}	V_{DS}=10V	I_D=220mA	0.12	0.5		S
Drain–Source Diode Forward Voltage	V_{SD}	V_{GS}=0V	I_S=440mA		0.8	1.4	V
Input Capacitance	C_{iss}	V_{DS}=10V f=1.0MHz	V_{GS}=0V				

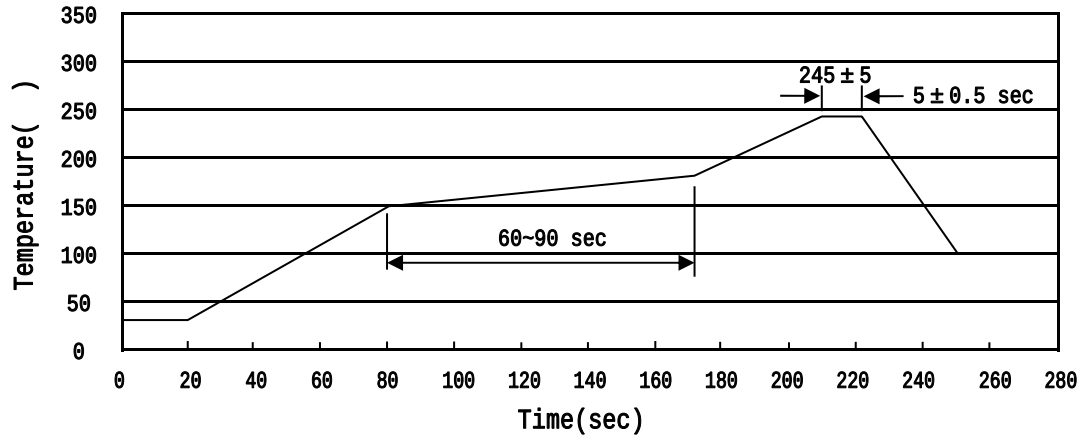
/ Electrical Characteristic Curve



/ Package Dimensions



( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



			Note:
1	150 180	60 90sec;	1.Preheating:150~180 , Time:60~90sec.
2	245±5	5±0.5sec;	2.Peak Temp.:245±5 , Duration:5±0.5sec.
3	2 10 /sec.		3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5	10±1 sec.	Temp.:260±5	Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension		(unit mm³)
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SOT-23	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices