

/ Descriptions

SOT23-3 P MOS

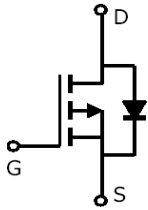
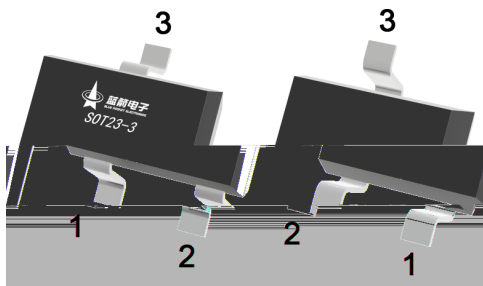
- CHANNEL MOSFET in a SOT23-3 Plastic Package.

/ Features $V_{DS} (V) = -12V$ $I_D = -8.0A$ $R_{DS(ON)} @ -10V \leq 20m\Omega$ (Type.18m Ω) $R_{DS(ON)} @ -4.5V \leq 25m\Omega$ (Type.21m Ω) $R_{DS(ON)} @ -2.5V \leq 30m\Omega$ (Type.27m Ω) $R_{DS(ON)} @ -1.8V \leq 50m\Omega$ (Type.40m Ω)

HF Product.

/ Applications

PWM applications, Load switch, Power management.

/ Equivalent Circuit**/ Pinning**

PIN1 G

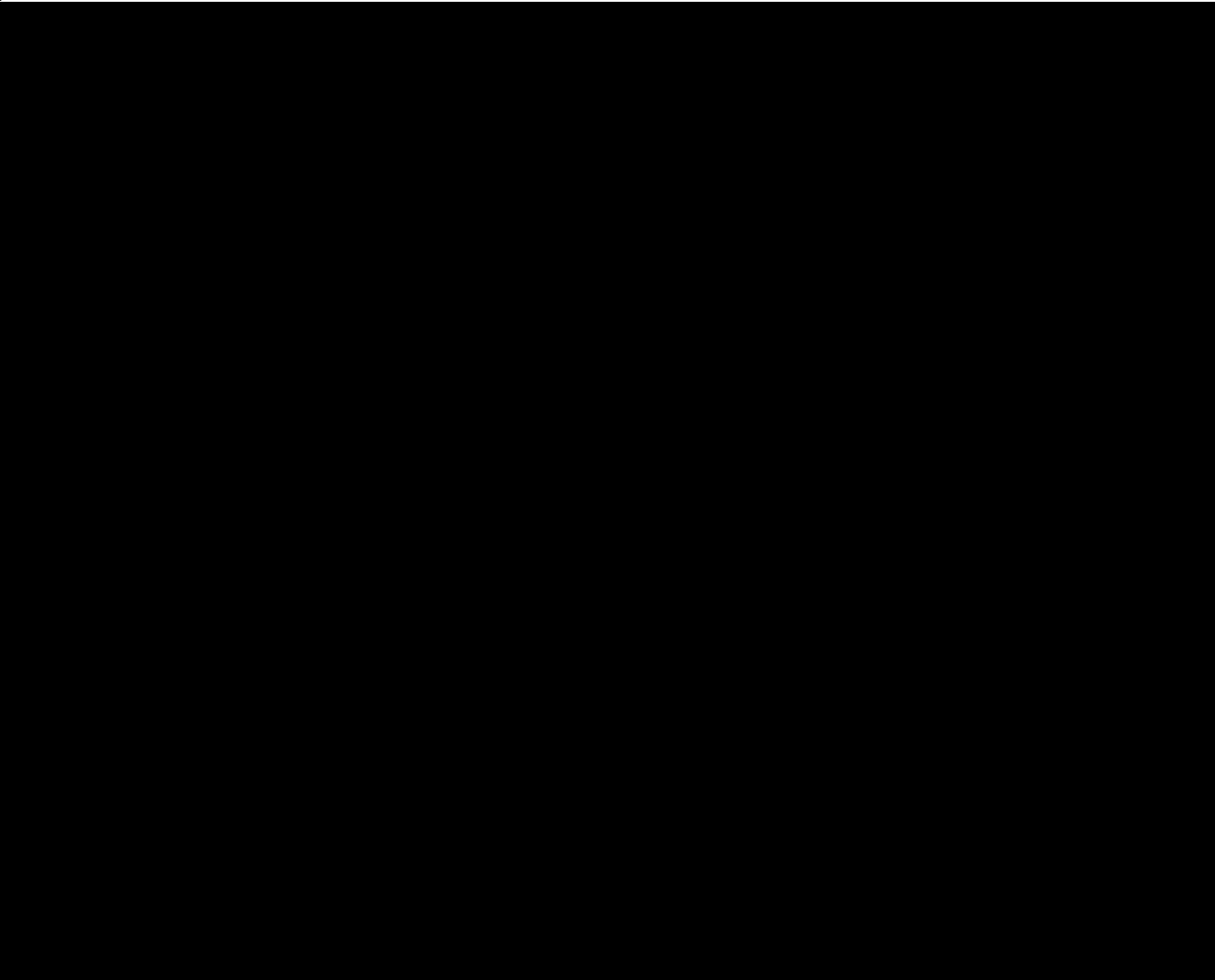
PIN 2 S

PIN 3 D

/ Marking

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	-12	V
Gate-Source Voltage	V_{GSS}	± 8	V
Continuous Drain Current	$I_D(T_C=25\text{ }^{\circ}\text{C})$	-8.0	A
Pulsed Drain Current	I_{DM}	-25	A
Power Dissipation for Single Operation	$P_D(T_C=25\text{ }^{\circ}\text{C})$	1.8	W
Maximum Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	
Thermal Resistance-Junction to Ambient	$R_{\theta JA}$	125	/W
Thermal Resistance-Junction to Case	$R_{\theta JC}$	69	/W



Unit
V
μA
nA
V

/ Electrical Characteristic Curve

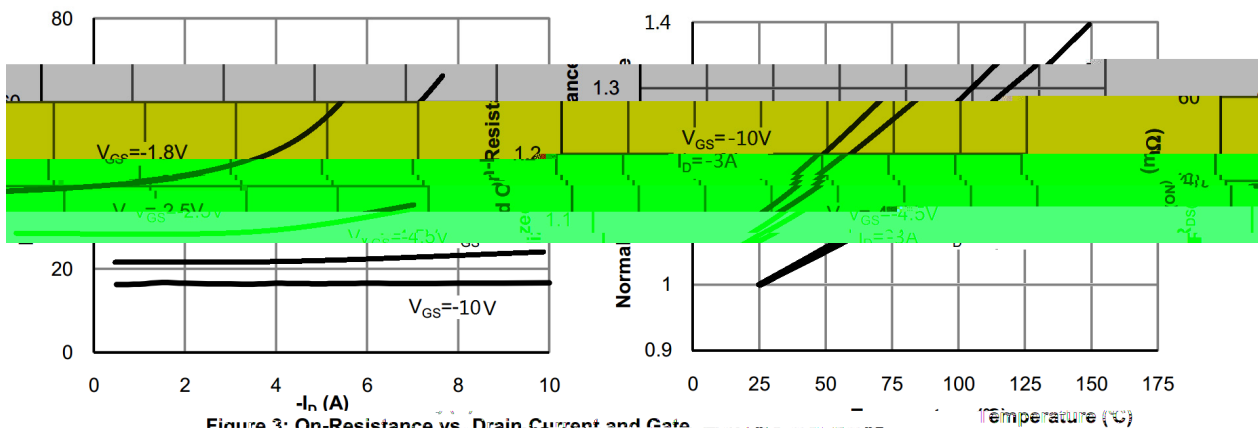
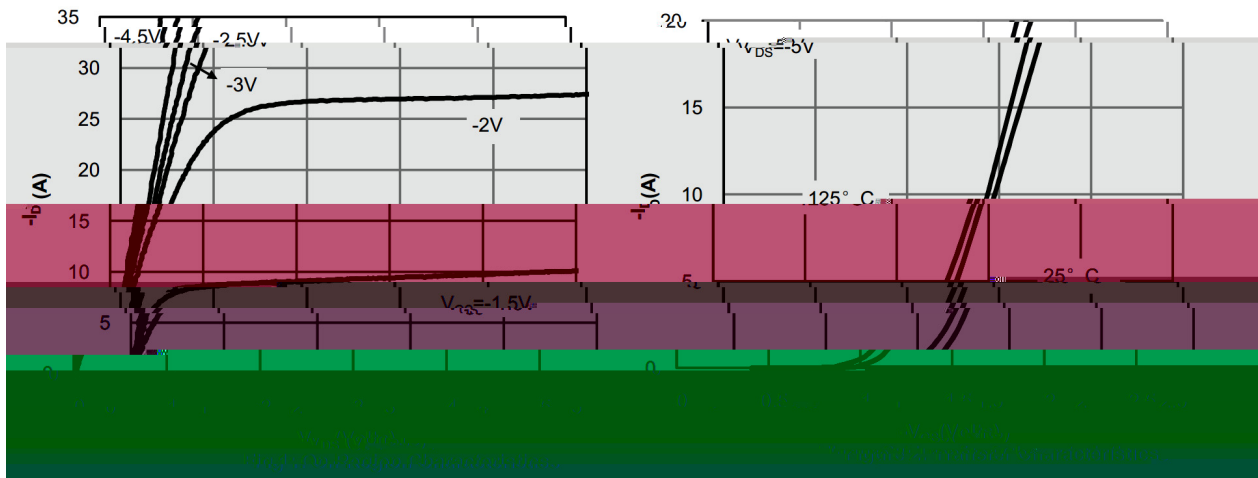


Figure 3: On-Resistance vs. Drain Current and Gate Voltage

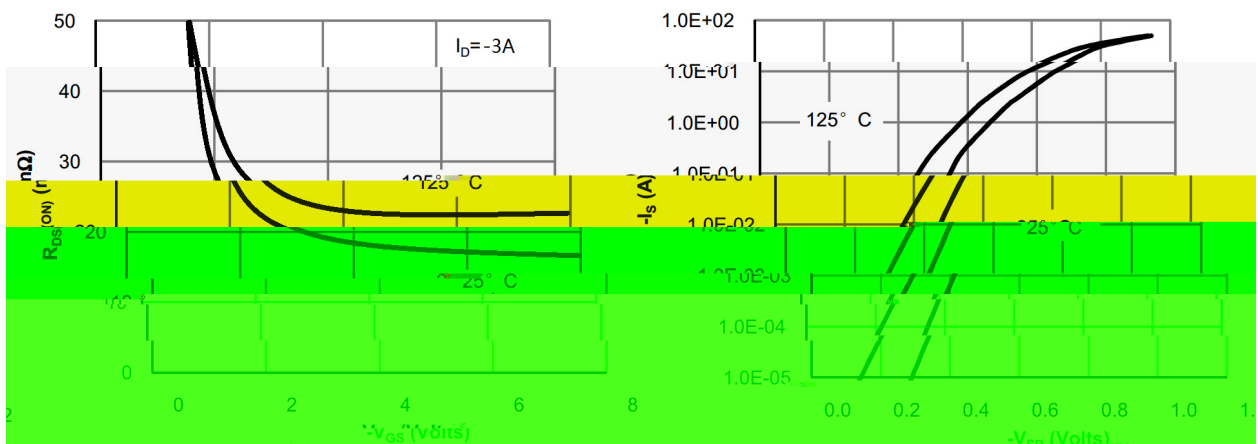


Figure 5: On-Resistance vs. Gate-Source Voltage

Figure 6: Body-Diode Characteristics

/ Electrical Characteristic Curve

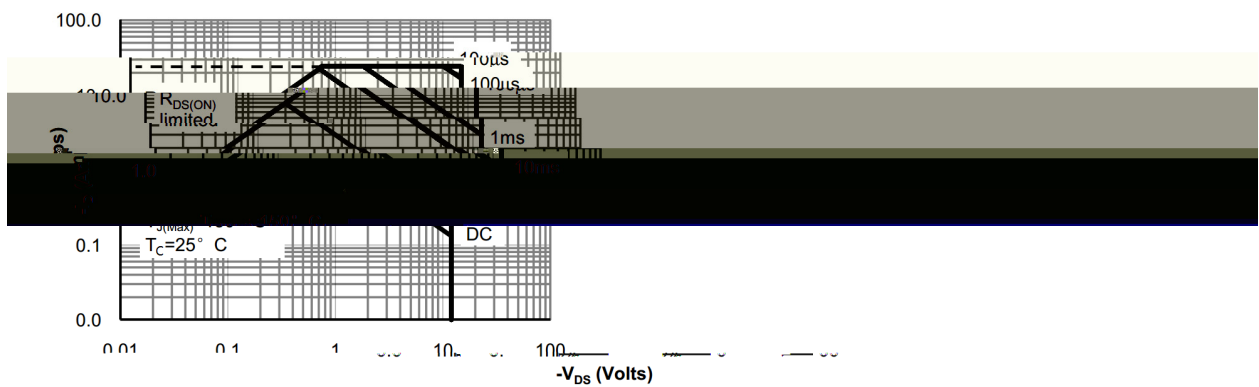
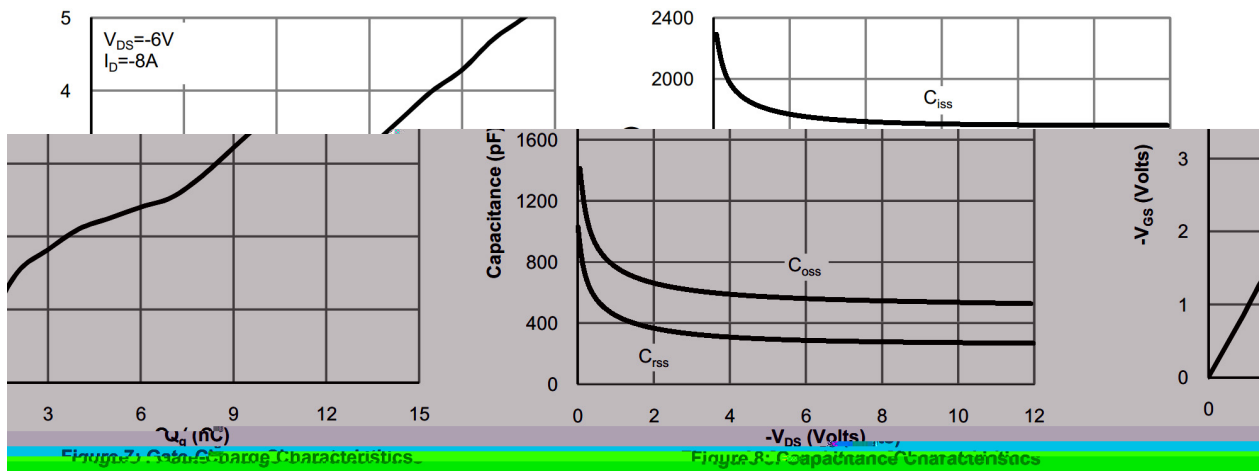


Figure 9: Maximum Forward Biased Safe Operating Area

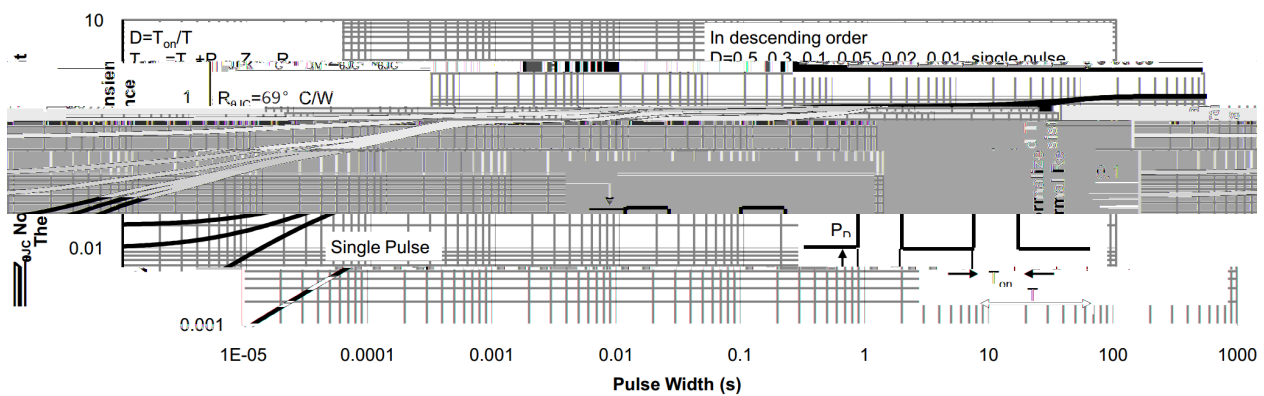
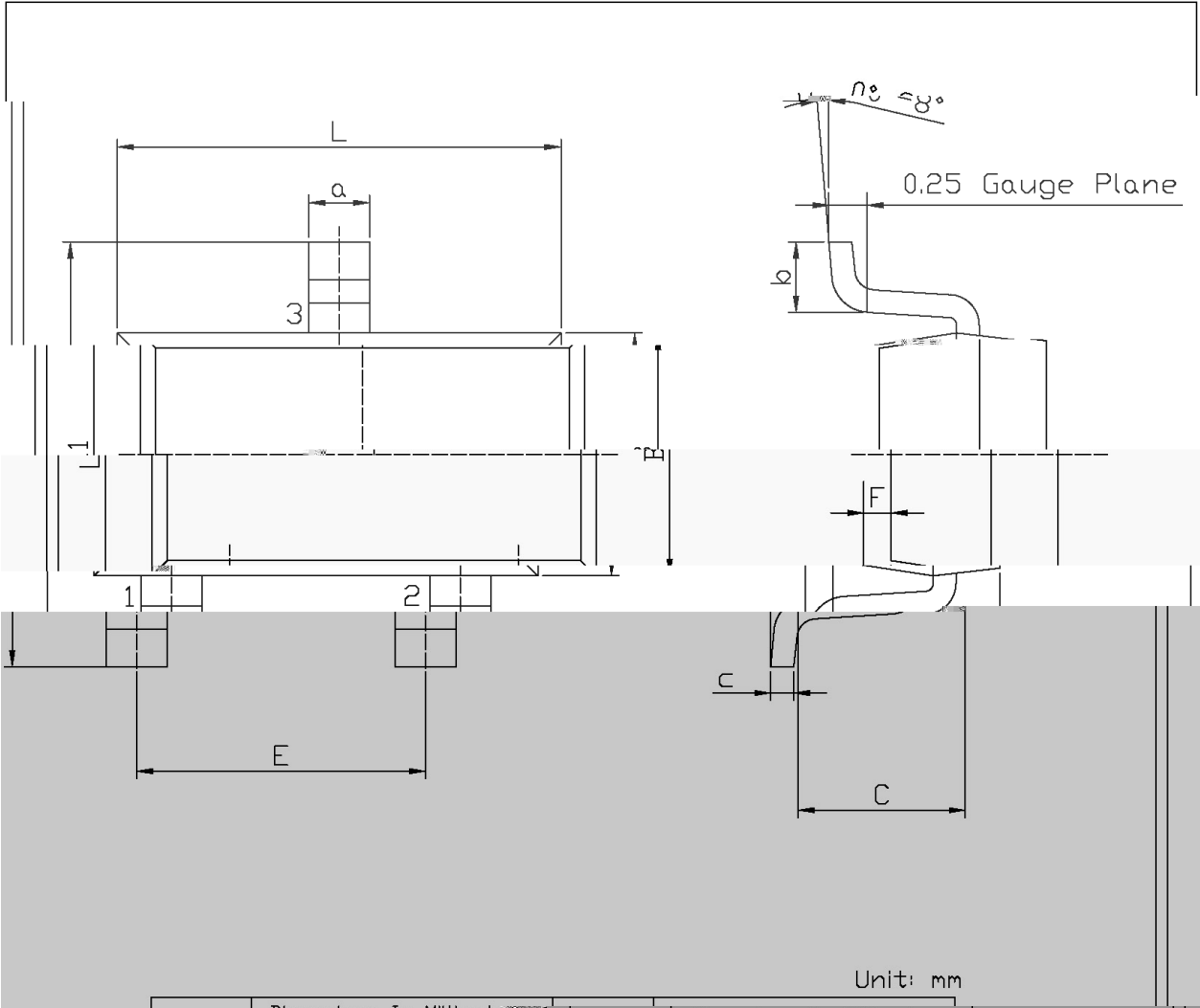


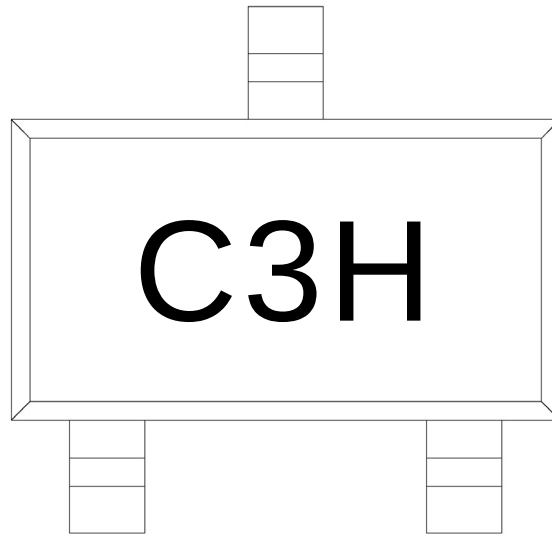
Figure 10: Normalized Maximum Transient Thermal Impedance

/ Package Dimensions



Dimensions in Millimeters		Dimensions in Inches	
L	2.92	2.00	0.0787
a	0.25	0.01	0.0039
3	0.25	0.01	0.0039
1	0.25	0.01	0.0039
2	0.25	0.01	0.0039
E	0.25	0.01	0.0039
C	0.25	0.01	0.0039
F	0.25	0.01	0.0039
b	0.25	0.01	0.0039

/ Marking Instructions



C3

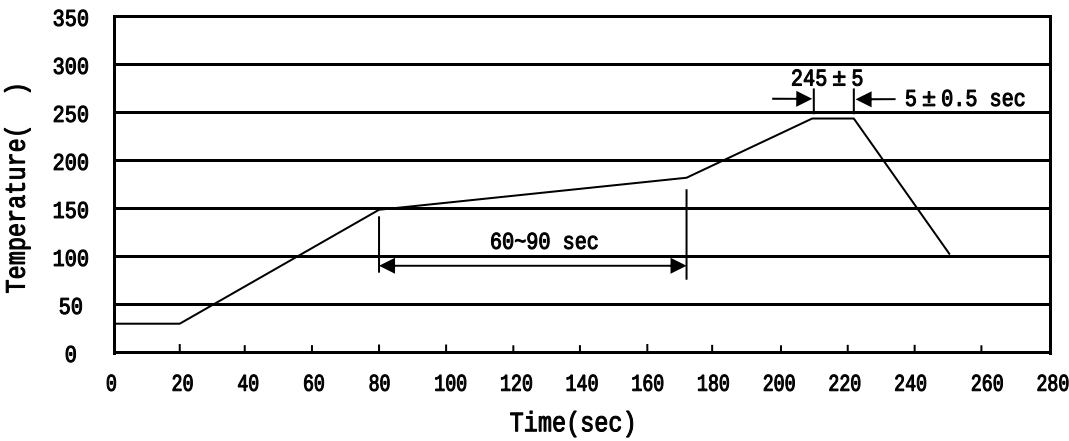
H

Note:

C3: Product Type Code

H: Company Code

() / 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 mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOT23-3	3,000	10	30,000	4	120,000	7 ×8	210×205×205	445×435×230

/ Notices