

BRCS2310MF

Rev.A Apr.-2024

SOT23-6 N

N-CHANNEL MOSFET in a SOT23 -6 Plastic Package.

$V_{DS}(V)=60V$ $I_D=3A$

$R_{DS(ON)}@10V<90m$ (Typ. 70mR)

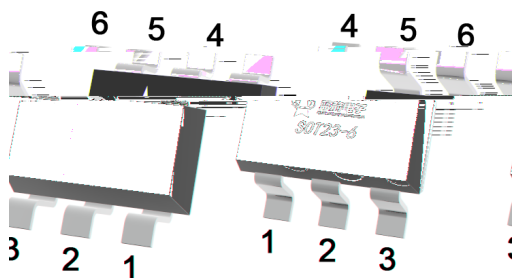
$R_{DS(ON)}@4.5V<110m$ (Typ. 85mR)

HF Product.

DC-DC

Battery management,High speed switch,low power DC to DC converter.

 / Equivalent Circuit



PIN1 D PIN 2 D PIN 3 G PIN 4 S PIN 5 D PIN 6 D

,MV / Marking

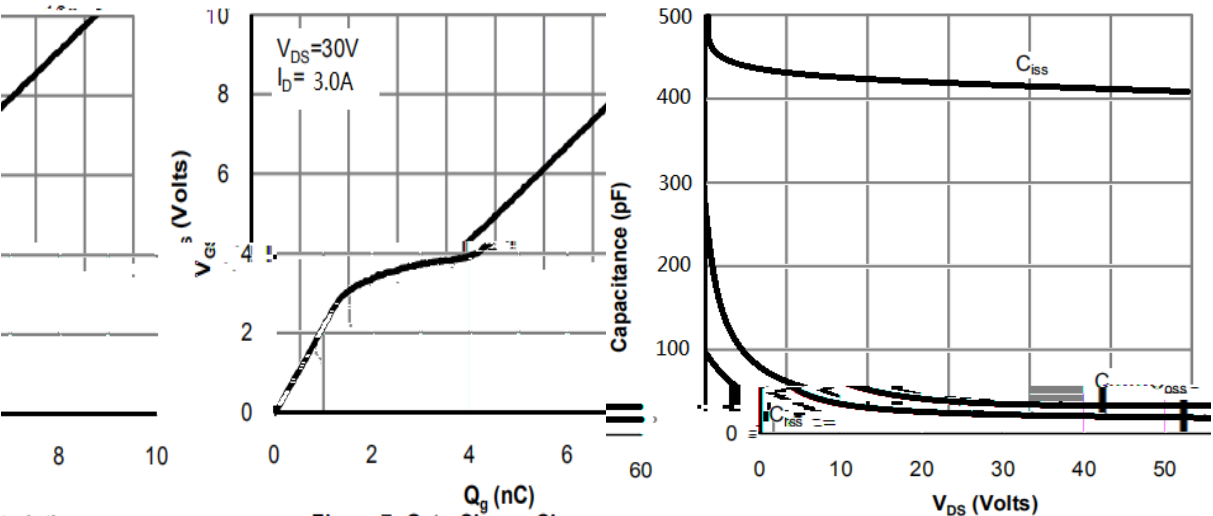
See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	± 20	V
Drain Current – Continuous	I_D	3.0	A
Pulsed Drain Current	I_{DM}	15	A
Power Dissipation	P_D	0.9	W
Storage Temperature Range	T_{stg}	-55 150	
Maximum Junction-to-Ambient	$R_{\theta A}$	139	/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain–Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS}=0$ $I_D=10$ A	60	68		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{GS}=0$ $V_{DS}=60V$			1.0	A
Gate–Body Leakage.	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			± 100	nA
Static Drain–Source On–Resistance	$R_{DS(on)1}$	$V_{GS}=10V$ $I_D=3A$		73	90	m
	$R_{DS(on)2}$	$V_{GS}=4.5V$ $I_D=3A$		85	110	m
Drain–Source Diode Forward Voltage	V_{SD}	$V_{GS}=0V$ $I_D=1A$		0.75	1.2	V
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=50$ A	1.0	1.4	3.0	V
Maximum Body-Diode Continuous Current	I_S				3	A
Input Capacitance	C_{iss}			415		
Output Capacitance	C_{oss}	$V_{GS}=0V$, $f=1MHz$ $V_{DS}=25V$		37		pF



/ Electrical Characteristic Curve



teristics

Figure 7: Gate-Charge Characteristics

Figure 8: Capacitance Characteristics

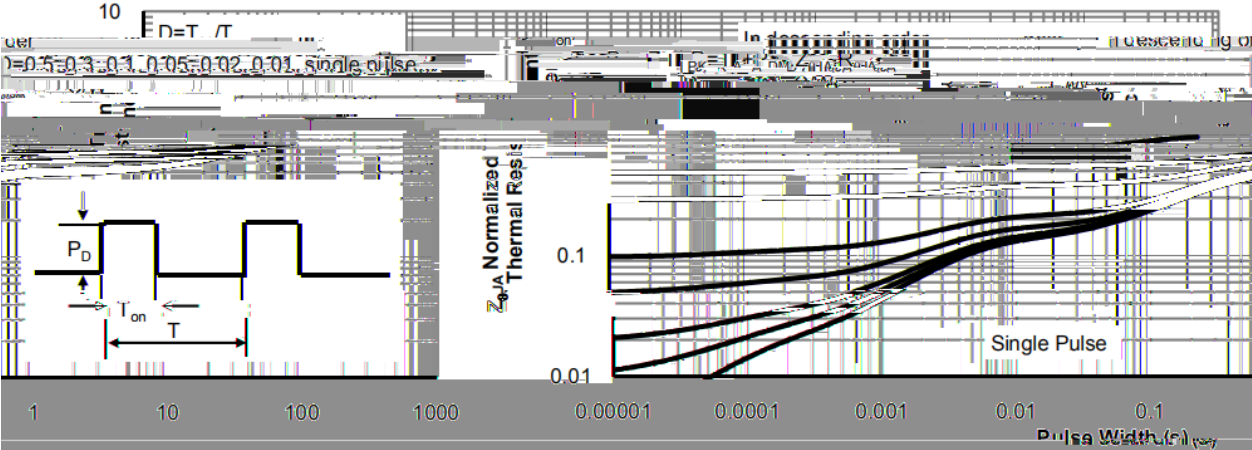
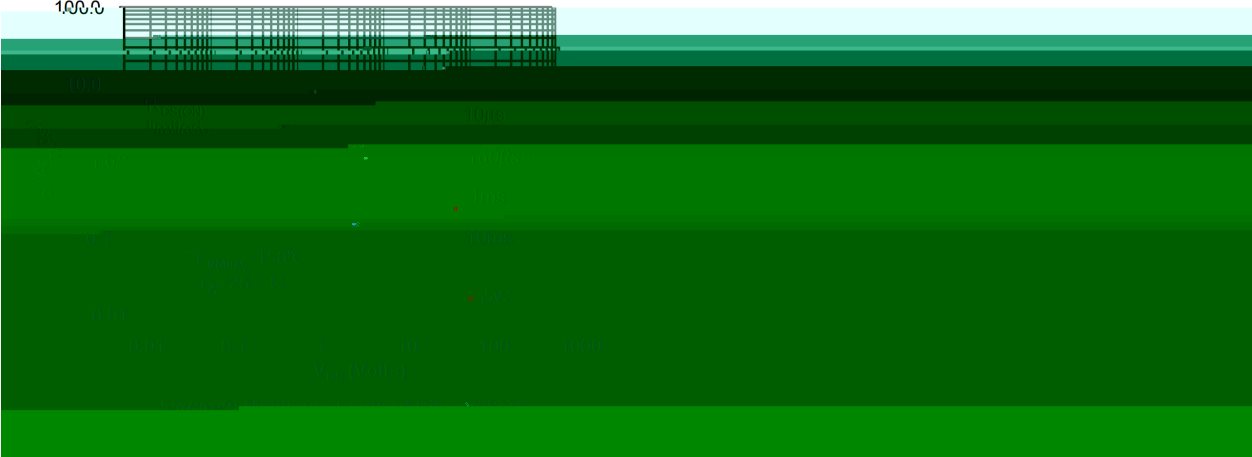
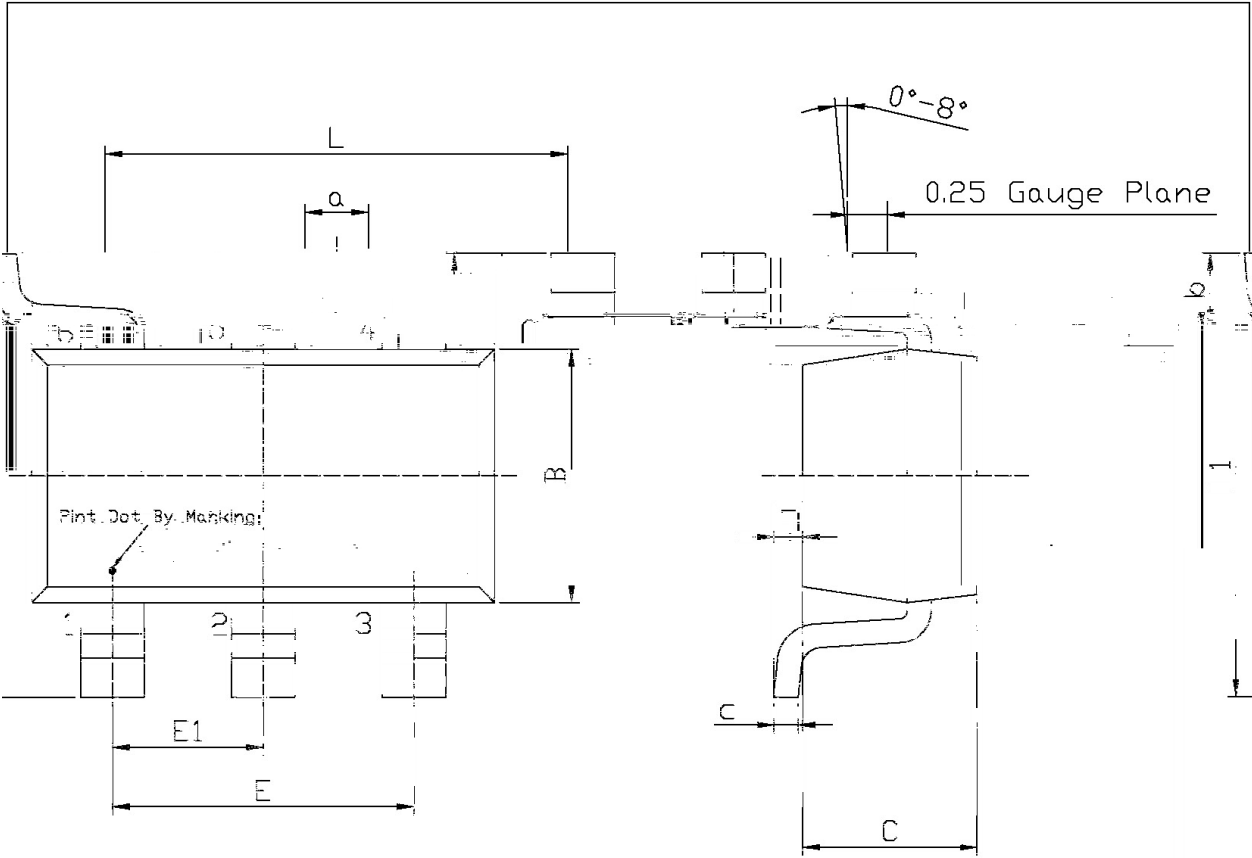


Figure 10: Normalized Maximum Transient Thermal Impedance

⌀ / Package Dimensions

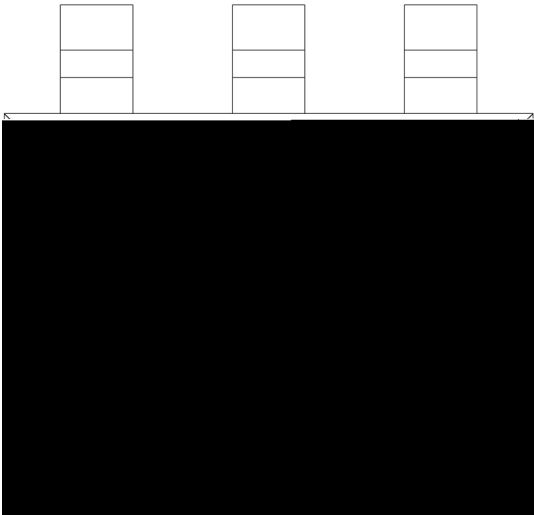


Unit: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
L	2.82	3.32	E1	0.85	1.05
B	1.50	1.70	a	0.35	0.50
C	0.90	1.30	c	0.10	0.20
L1	2.60	3.00	b	0.35	0.55
E	1.80	2.00	F	0	0.15

SOT23-6

,Myf / Marking Instructions



H

310:

****:

Note:

- H:

310:

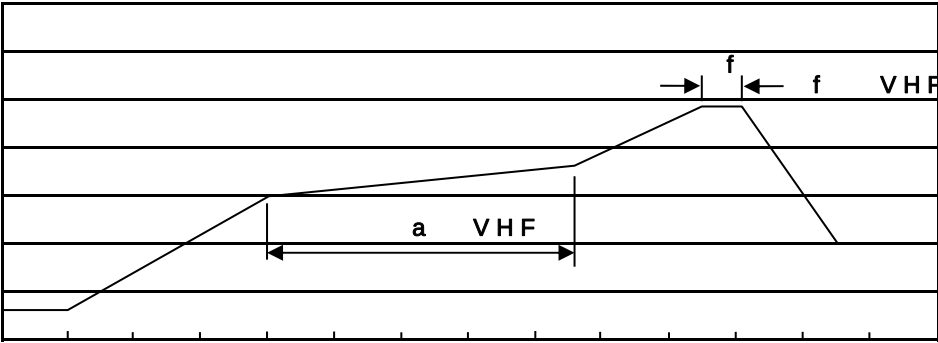
****:
- Company Code

Product Type Code

Lot No. Code, code change with Lot No

7HPSHUDWUH (x/) / 6P3KPHM6HK

7HPSHUDWUH



7LPH VHF

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. |

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

GPá / Packaging SPEC.

/ REEL

Package Type 7>û ~ E	Units ;>û H					Dimension ;>û p . (unit /mm³)		
	Units/Reel / --	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Reel	Inner Box	Outer Boxç
SOT23-5/6	3,000	10	30,000	4	120,000	7 s ×8	210×205×205	445×435×230

df / Notices