

BRCS5P06MA

Rev.C Oct.-2022



DATA SHEET

SOT-23 P

- CHANNEL MOSFET in a SOT-23 Plastic Package.

Ultra Low on-resistance. fast switching.Low on voltage,HF Product.

Parameter		Symbol	Rating	Unit
Drain–Source Voltage		V_{DS}	-60	V
Gate–Body Leakage Voltage		V_{GSS}	± 20	V
Drain Current - Continuous		I_D	-5	A
Pulsed Drain Current		I_{DM}	-18	A
Power Dissipation (Surface Mounted on FR4 Board, $t \leq 10$ sec.)		P_D	1.5	W
Operating and Storage Temperature Range		T_J, T_{STG}	-55 150	
Maximum Junction-to-Ambient	$t \leq 10s$	$R_{\theta JA}$	118.6	/W
Maximum Junction-to-Ambient	Steady-State		161.6	/W
Maximum Junction-to-Lead	Steady-State	$R_{\theta JL}$	83.3	/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain–Source Breakdown Voltage	$V_{(BR)DS}$	$V_{GS}=0V$ $I_D=-250\mu A$	-60	-63		V
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=-250\mu A$	-1	-1.5	-2.5	V
Static Drain–Source On–Resistance	$R_{DS(on)}$	$V_{GS}=-10V$ $I_D=-2A$		84	100	m Ω
		$V_{GS}=-4.5V$ $I_D=-1A$		103	125	m Ω
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-60V$ $V_{GS}=0V$			-1.0	μA
Gate–Body Leakage.	I_{GSS}	$V_{GS}=-20V$			-100	nA
		$V_{GS}=20V$			100	nA
Drain–Source Diode Forward Voltage	V_{SD}	$V_{GS}=0V$ $I_S=-1A$ $T_J=25$			-1.2	V
Input Capacitance	C_{iss}	$V_{DS}=-25V$ $V_{GS}=0V$ $f=1.0MHz$		885		

Output Capacitance .47998 17.8204 55.62 328.4958 004511.5 (-) 3355.703 Tm.0023 Tc0 Tw(Gos) Tlp074958 0 0 10.0

/ Electrical Characteristic Curve

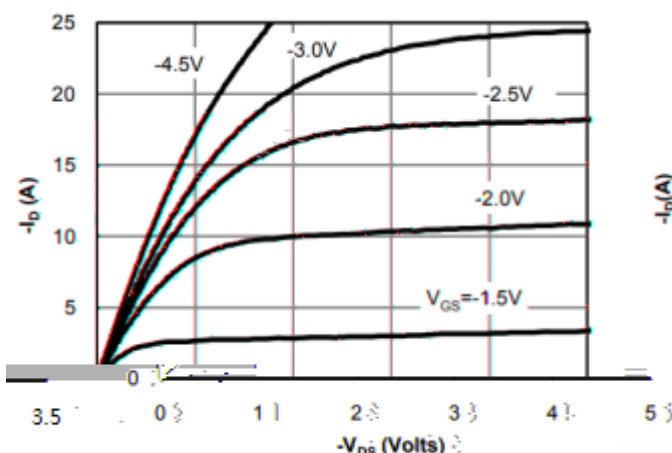


Figure 1: On-Region Characteristics

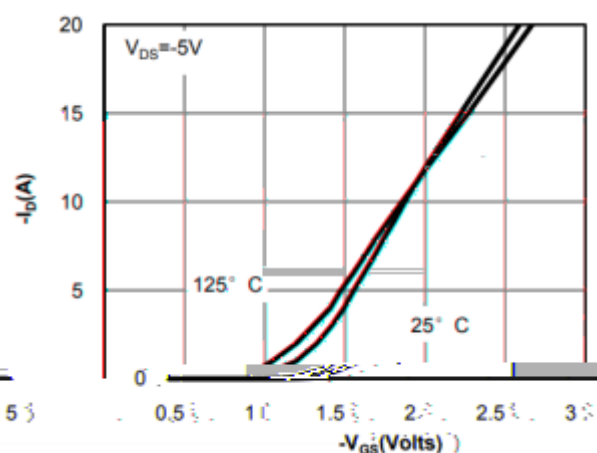


Figure 2: Transfer Characteristics

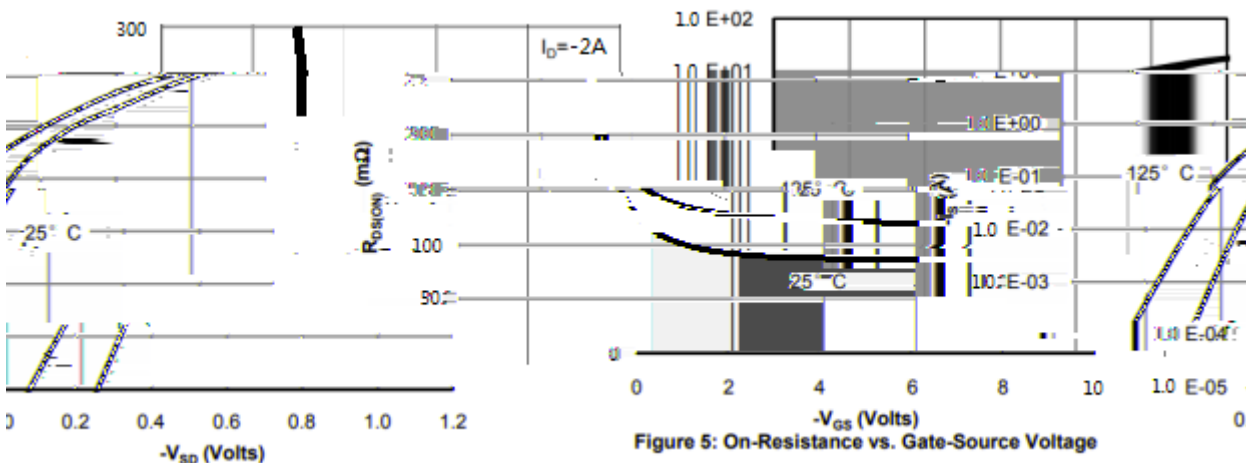
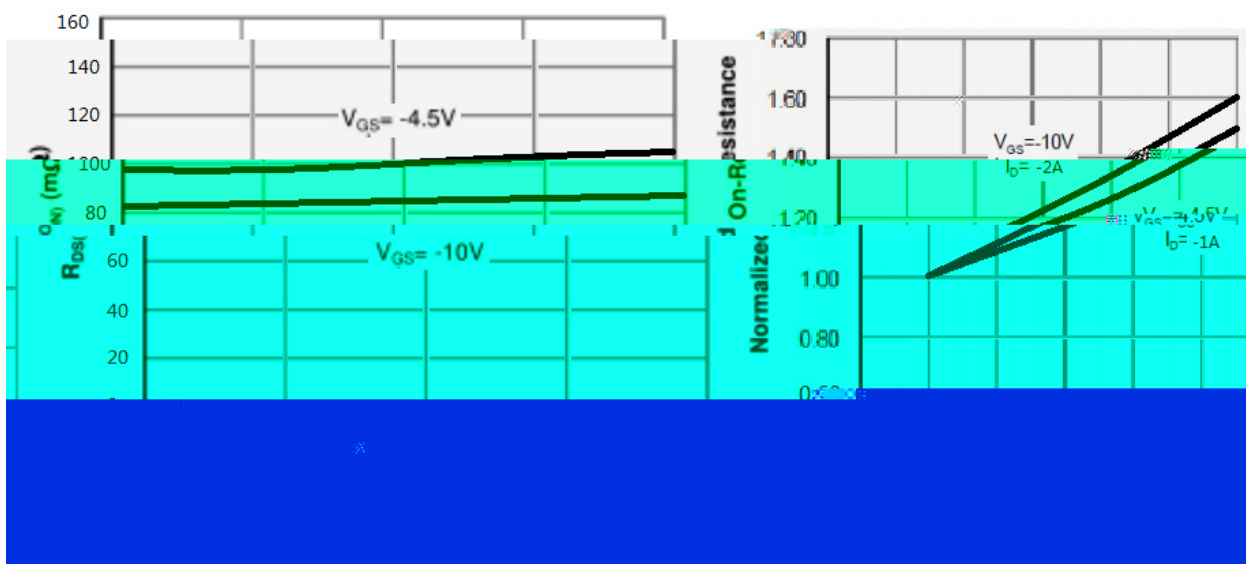


Figure 5: On-Resistance vs. Gate-Source Voltage

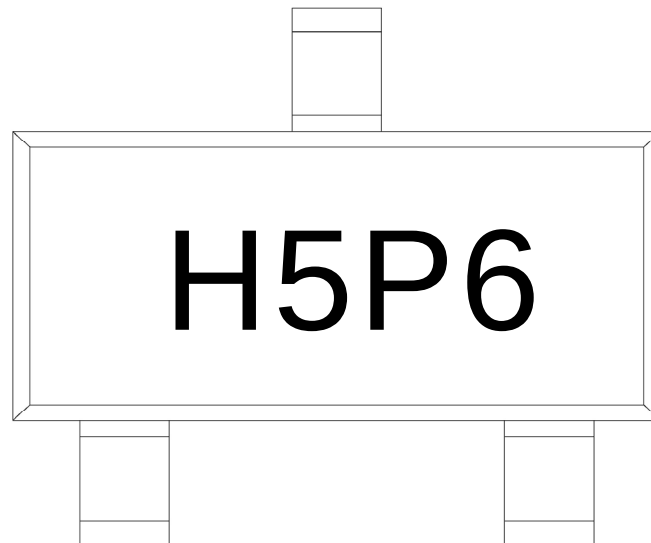
/ Package Dimensions

SOT-23

单位: mm



/ Marking Instructions



H:

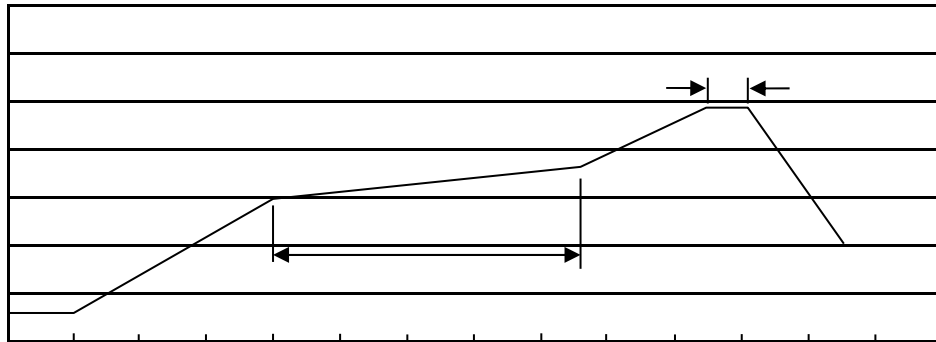
5P6

Note:

H Company Code

5P6: Product Type

() / 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)

/ Notices