

5 é / Descriptions

SOP-8 .> // x ; m Í %” MOS « | • 'ož

Complementary Enhancement MOSFET in a SOP-8 Plastic Package.

α^a / Features

N-channel	P-channel
$V_{DS}(V)=30V$	$V_{DS}(V)=-30V$
$I_D=7.2A$	$I_D=-7A$
$R_{DS(ON)}<25m\ \Omega\ (V_{GS}=10V)$	$R_{DS(ON)}<25m\ \Omega\ (V_{GS}=-10V)$
$R_{DS(ON)}<35m\ \Omega\ (V_{GS}=4.5V)$	$R_{DS(ON)}<35m\ \Omega\ (V_{GS}=-4.5V)$
—)í D }ož . , 6 X U J [I Z	

Đ ÷ / Applications

9 ä ä *) *) ô E y ä • ¼ož 9 • ç ú • ¼ ê !² ò • ož

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies. And suitable for use as a load switch or in PWM applications.

Ã W] Ô • / Equivalent Circuit

• Ů - æ / Pinning

PIN 1 y S1 PIN 2 y G1 PIN 3 y S2 PIN 4 y G2
 PIN 5 y D2 PIN 6 y D2 PIN 7 y D1 PIN 8 y D1

, M V / Marking

• - ~^a çož

See Marking Instructions.

Table 1 / Absolute Maximum Ratings (T_A=25 °C ;)

Parameter	Symbol	Rating		Unit
		N-channel	P-channel	
Drain-Source Voltage	V _{DSS}	±30		V
Gate-Source Voltage	V _{GSS}	±20		V
Continuous Drain Current	I _D (T _A =25 °C)	7.2	-7	A
Pulsed Drain Current	I _{DM}	±40		A
Power Dissipation	P _D (T _A =25 °C)	2		W
Maximum Junction-to-Ambient	R _{JA}	t ^{10s}	62.5	/W
		Steady-State	90	/W
Maximum Junction-to-Lead	R _{JL}	Steady-State	40	/W
Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150		

@ f Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=250 A$	30	32		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=30V$ $V_{GS}=0V$			1.0	A
Gate-Body leakage current	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250 A$	1.0	1.7	2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=7.2A$		21	25	m

BRCS4620SC

1 ?è Ô ? d • Ž ¢ / N-CHANNEL Electrical Characteristic Curve

@ f Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=-250$ A	-30	-33		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-24V$ $V_{GS}=0V$			-1.0	A
Gate-Body leakage current	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=-250$ A	-1.0	-1.5	-2.5	V

Static Drain-Source
On-Resistance

$R_{DS(on)}$

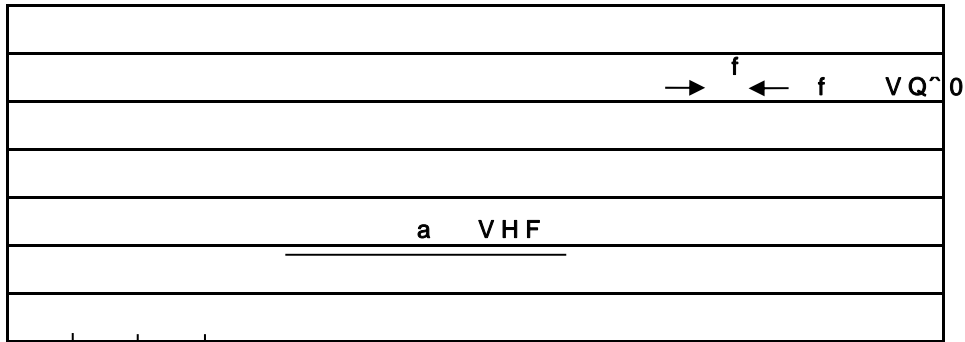
3 ? è Ô ? d • Ž ¢ / P-CHANNEL Electrical Characteristic Curve

3 ? è Ô ? d • Ž ¢ / P-CHANNEL Electrical Characteristic Curve

Ø □ =) ϕ / Package Dimensions

BRCS4620SC

šWD t...•Žç (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6



7 L P Q ° † 2 æ 0 q L p `

a ç y

Note:

1o• Ä ½ “ † 150 ½180 - k ž • 60 ½90sec;

1.Preheating:150~180 - , Time:60~90sec.

2o• Q › “ † 245 r5 - k ž • 4 Ò 5 r0.5sec;

2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.

3o•D N ò i Ò 0 , † 2 ½10 - /sec.

3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ~ »] / Resistance to Soldering Heat Test Conditions

“ † y 260 r5 -

ž • y 10 r1 sec.

Temp.:260±5

Time:10±1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type 7>û ~ E	Units ;>û iH					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