/ Descriptions

SOT23-3 Ł P ڪ MOS ٦

S- CHANNEL MOSFET in a SOT23-3 Plastic Package.

/ Features

YGV +Y, = 049Y LG = 0:13D

UGV+RQ, C 0718Y≤53mΩ+Wys1 4:18mΩ,

UGV+RQ, C 0518Y≤63mΩ+Wys1 5913mΩ,

UGV+RQ, C 041;Y≤433mΩ+Wys1 7318mΩ,

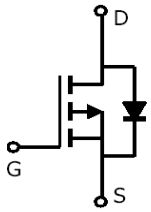
KF Srrgxfw1

/ Applications

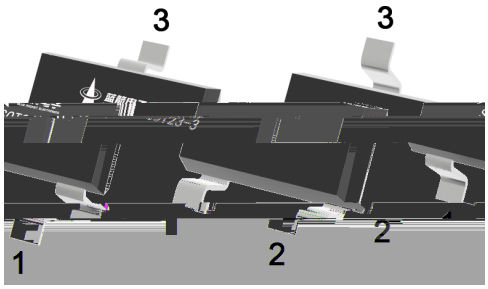
٦ Ф ٧ ٨

Power Management in Notebook computer, Portable Equipment and Battery powered systems.

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 S PIN 3 D

/ Marking

Marking	C6H

/ Absolute Maximum Ratings(Ta=25)

Parameter	ㄱ N Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	-16	V
Gate-Source Voltage	V_{GSS}	±12	V
Continuous Drain Current	I_D	-7.0	A
Pulsed Drain Current	I_{DM}	-30	A
Power Dissipation for Single Operation	P_D	1.2	W
Maximum Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	
Thermal Resistance-Junction to Ambient	R_{dJA}	100	/W

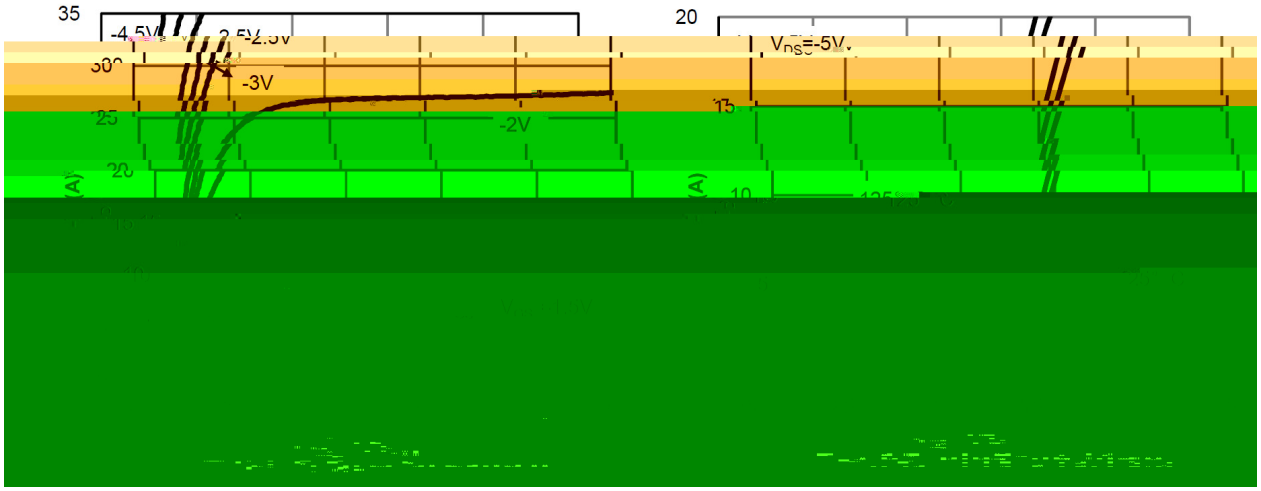
/ Electrical Characteristics(Ta=25)

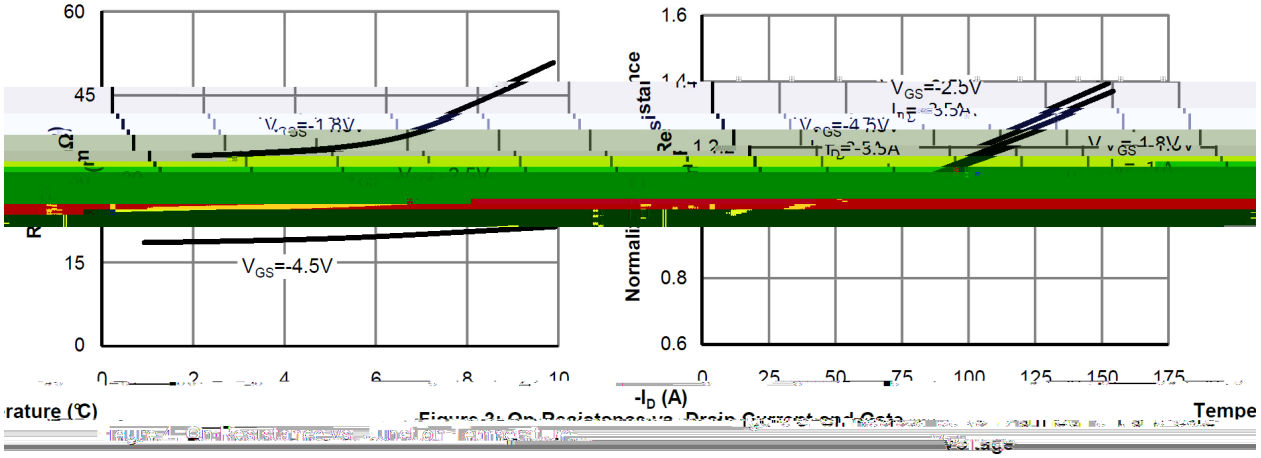
Parameter	ㄱ N Symbol	: Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	I_D=-250εA V_{GS}=0V	-16	-17		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-12.8V V_{GS}=0V			-1.0	εA
Gate-Body leakage current	I_{GSS}	V_{DS}=0V V_{GS}=±12V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=VGS I_D=-250εA	-0.5	-0.6	-1.0	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-4.5V I_D=-3.5A		17.5	20	mΩ
		V_{GS}=-2.5V I_D=-3.5A		26	30	
		V_{GS}=-1.8V I_D=-1A		40.5	100	
Diode Forward Voltage	V_{SD}	I_S=-1A V_{GS}=0V			-1.2	V
Gate resistance	Rg	V_{GS}=0V, V_{DS}=0V, f=1MHz		5.8		Ω
Input Capacitance	C_{iss}	V_{GS}=0V V_{DS}=-5V f=1MHz		1350		pF
Output Capacitance	C_{oss}			290		
Reverse Transfer Capacitance	C_{rss}			250		

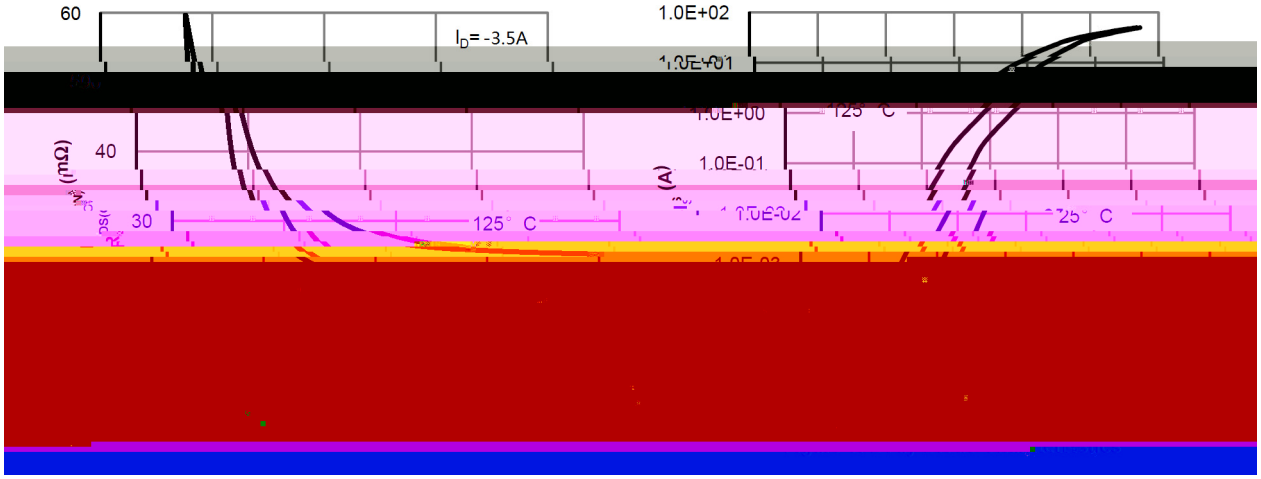
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	Q_g	V_{GS}=-4.5V, V_{DS}=-10V, I_D=-7.0A		13.2		nC
Gate Source Charge	Q_{gs}			1.5		
Gate Drain Charge	Q_{gd}			3.6		
Turn–On Delay Time	$t_{d(on)}$	V_{GS}=-4.5V I_D=-7.0A V_{DS}=-10V R_{GEN}=3q		13.7		ns
Turn–On Rise Time	t_r			47.6		
Turn–Off Delay Time	$t_{d(off)}$			43.1		
Turn–Off Fall Time	t_f			29.5		

/ Electrical Characteristic Curve

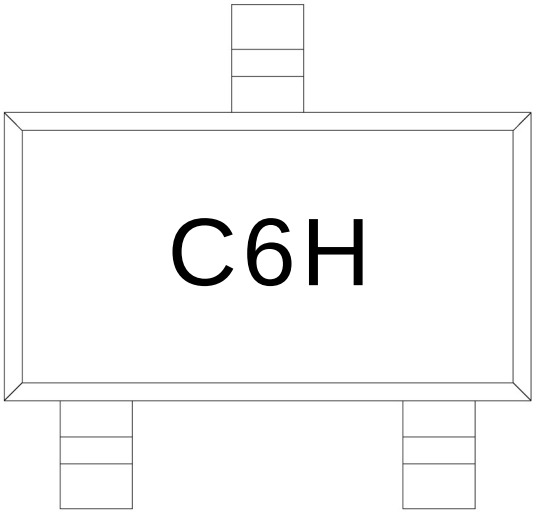






/ Electrical Characteristic Curve

/ Marking Instructions



C6 N .

H И .

Note:

C6: Product Type Code

H: Company Code

BRCS200P016MC