

Product Summary

$V_{(BR)DSS}$	$R_{DS(on)TYP}$	I_D
-60V	75mΩ@-10V	-3A
	90mΩ@-4.5V	

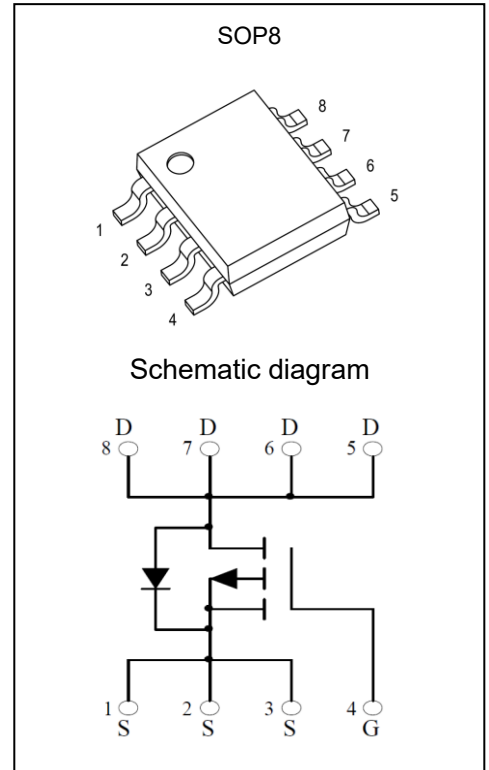
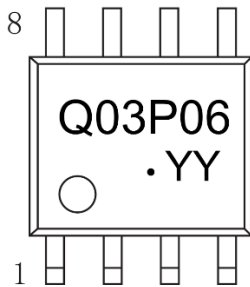
Feature

- TrenchFET Power MOSFET
- Excellent $R_{DS(on)}$ and Low Gate Charge

Application

- Power switching application
- Hard switched and high frequency circuits
- DC-DC Converter

MARKING:



ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	-60	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	I_D	-3	A
Plused Drain Current	I_{DM}	-12	A
Power Dissipation	P_D	1.4	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	89	$^{\circ}C/W$
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature	T_{STG}	-55~ +150	$^{\circ}C$

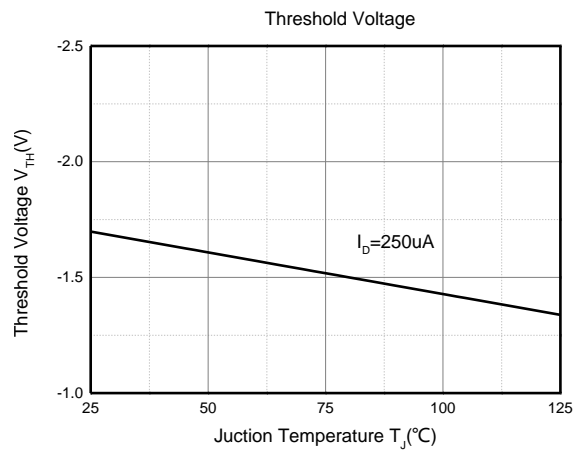
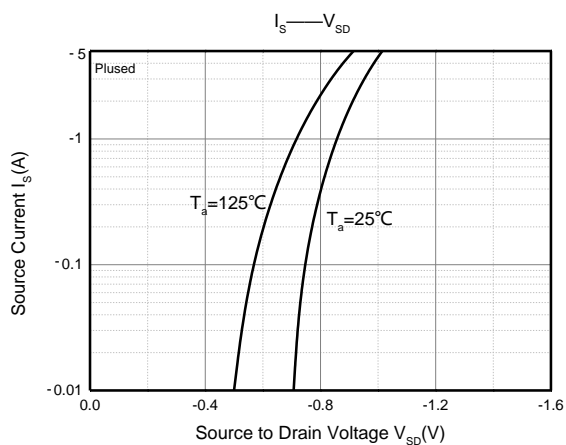
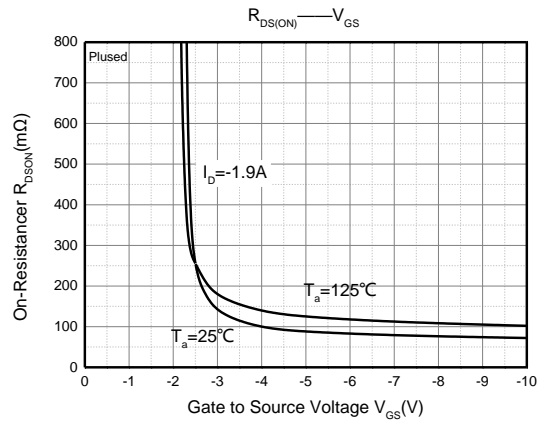
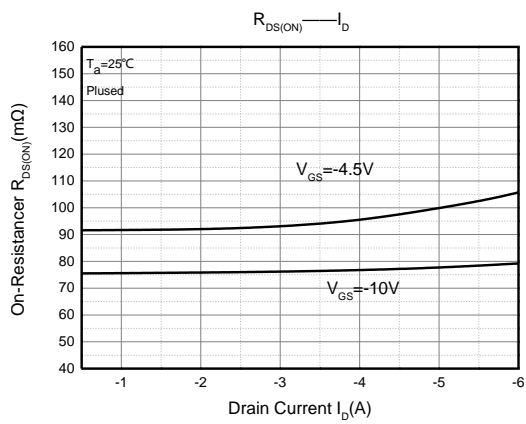
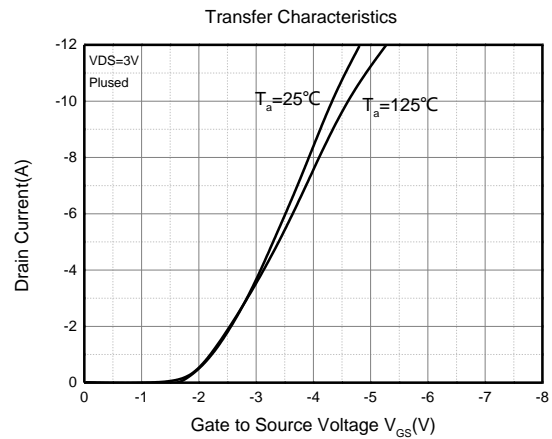
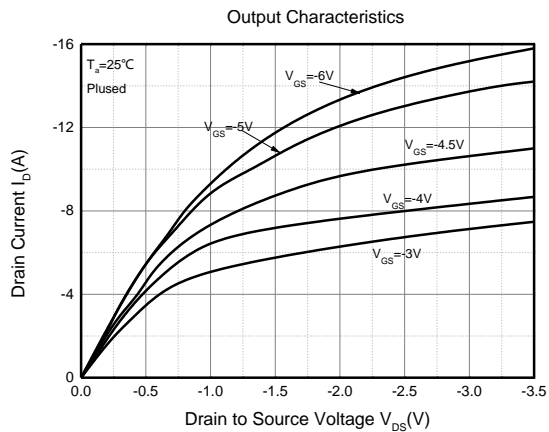
MOSFET ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Off characteristics						
Drain-source breakdown voltage	V _{(BR)DSS}	V _{GS} = 0V, I _D = 250μA	-60			V
Zero gate voltage drain current	I _{DSS}	V _{DS} = -48V, V _{GS} = 0V			-1	μA
Gate-body leakage current	I _{GSS}	V _{GS} = ±20V, V _{DS} = 0V			±100	nA
On characteristics⁽¹⁾						
Gate threshold voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D = 250μA	-1.0	-1.7	-2.5	V
Drain-source on-resistance	R _{DS(on)}	V _{GS} = -10V, I _D = -3A		75	98	mΩ
		V _{GS} = -4.5V, I _D = -1.6A		90	120	
Forward transconductance	g _{FS}	V _{DS} = -15V, I _D = -3A	3			S
Switching characteristics⁽²⁾						
Input Capacitance	C _{iss}	V _{DS} = -30V, V _{GS} = 0V, F = 1.0MHz		1255		pF
Output Capacitance	C _{oss}			260		
Reverse Transfer Capacitance	C _{rss}			90		
Total gate charge	Q _g	V _{DS} = -30V, V _{GS} = -10V, I _D = -3A		34		nC
Gate-source charge	Q _{gs}			6		
Gate-drain charge	Q _{gd}			15		
Turn-on delay time	t _{d(on)}	V _{DD} = -30V, I _D = -1A, V _{GS} = -10V, R _G = 6Ω, R _L = 15Ω		16		ns
Turn-on rise time	t _r			19		
Turn-off delay time	t _{d(off)}			60		
Turn-off fall time	t _f			30		
Drain-Source Diode characteristics						
Diode Forward voltage ⁽¹⁾	V _{SD}	V _{GS} = 0V, I _S = -3A			1.2	V
Continues drain-source current	I _S				3	A
Pulsed drain-source current	I _{SM}				12	A

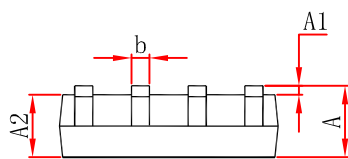
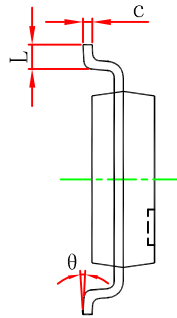
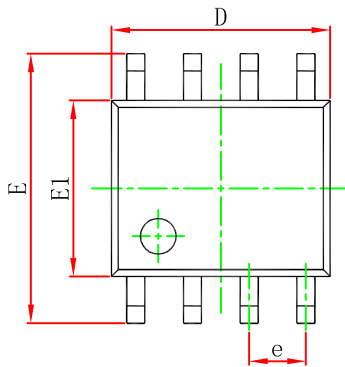
Notes:

1. Pulse Test : Pulse Width ≤ 300μs, duty cycle ≤ 2%.
2. Guaranteed by design, not subject to production testing.

Typical Electrical and Thermal Characteristics



SOP-8 Package Information



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.350	1.750	0.053	0.069
A1	0.100	0.250	0.004	0.010
A2	1.350	1.550	0.053	0.061
b	0.330	0.510	0.013	0.020
c	0.170	0.250	0.007	0.010
D	4.800	5.000	0.189	0.197
e	1.270 (BSC)		0.050 (BSC)	
E	5.800	6.200	0.228	0.244
E1	3.800	4.000	0.150	0.157
L	0.400	1.270	0.016	0.050
θ	0°	8°	0°	8°

单击下面可查看定价，库存，交付和生命周期等信息

[>>GP\(格瑞宝\)](#)