



P-Channel Enhancement Mode MOSFET

• -25V/-4.2A, $RDS(ON) = 130m\Omega(MAX)$ @VGS = -10V.

 $R_{DS(ON)} = 150 m \Omega(MAX) @V_{GS} = -4.5 V.$

 $R_{DS(ON)} = 180 m\Omega(MAX)$ @ $V_{GS} = -2.5V$.

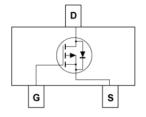
- Super High dense cell design for extremely low RDS(ON)
- Reliable and Rugged
- SC-59 for Surface Mount Package

Applications

• Power Management

Portable Equipment and Battery Powered Systems.





1: Gate 2: Source 3: Drain

Absolute Maximum Ratings TA=25°C Unless Otherwise noted

Parameter	Symbol	Limit	Units	
Drain-Source Voltage	V_{DS}	-25	V	
Gate-Source Voltage	V_{GS}	±12	V	
Drain Current-Continuous	I_D	-4.2	A	

Electrical Characteristics TA=25°C Unless Otherwise noted

Parameter	Symbol	Test Conditions	Min	Тур.	Max	Units		
Off Characteristics								
Drain to Source Breakdown Voltage	BVDSS	VGS=0V, ID=-250μA	- 25	-	-	V		
Zero-Gate Voltage Drain Current	IDSS	VDS=-24V, VGS=0V	-	-	-1	μA		
Gate Body Leakage Current, Forward	IGSSF	VGS=12V, VDS=0V	-	-	100	nA		
Gate Body Leakage Current, Reverse	IGSSR	VGS=-12V, VDS=0V	-	-	-100	nA		
On Characteristics								
Gate Threshold Voltage	VGS(th)	$VGS=VDS, ID=-250\mu A$	-0.7	-	-1.3	V		
Static Drain-source On-Resistance	RDS(ON)	VGS =-10V, ID =-4.2A	-	-	130	mΩ		
		VGS=4.5V, ID=4.0A	-	-	150	mΩ		
		VGS=-2.5V, ID =-1.0A	-	-	180	mΩ		
Drain-Source Diode Characteristics and Maximum Ratings								
Drain-Source Diode Forward Voltage	VSD	VGS =0V, IS=-1.0A			-1.0	V		

REV.08 1 of 3



Typical Characteristics

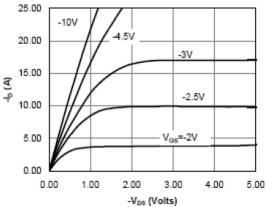


Fig 1: On-Region Characteristics

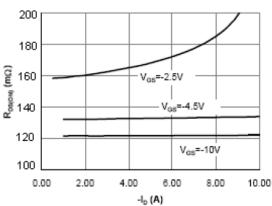
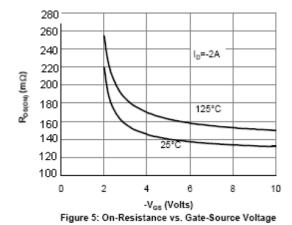


Figure 3: On-Resistance vs. Drain Current and Gate Voltage



10 8 6 6 125°C 25°C 0 0 0.5 1 1.5 2 2.5 3 -V_{gs}(Volts)

Figure 2: Transfer Characteristics

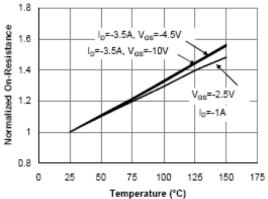


Figure 4: On-Resistance vs. Junction Temperature

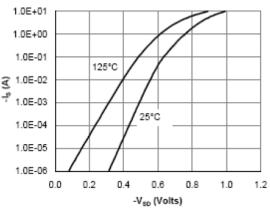


Figure 6: Body-Diode Characteristics



Package Outline Dimensions (UNIT: mm) SC-59

