



N-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}	60V
I_D	20A
$R_{DS(ON)}$ (at $V_{GS}=10V$)	43mohm
$R_{DS(ON)}$ (at $V_{GS}=4.5V$)	47mohm
100% EAS Tested	
100% V_{DS} Tested	

General Description

MV MOSFET technology
 Excellent package for heat dissipation
 High density cell design for low $R_{DS(ON)}$
 Epoxy Meets UL 94 V-0 Flammability Rating
 Halogen Free

Applications

DC-DC Converters
 Power management functions
 Backlighting

Absolute Maximum Ratings ($T_A=25$ unless otherwise noted)

Parameter	Symbol	Limit	Unit
Drain-source Voltage	V_{DS}	60	V
Gate-source Voltage	V_{GS}	≤ 20	V
Drain Current	I_D	$T_C=25$	20
		$T_C=100$	12
Pulsed Drain Current ^A	I_{DM}	60	A



YJR20N06A

Electrical Characteristics (T_J=25 unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameter						
Drain-Source Breakdown Voltage	BV _{DSS}	V _{GS} = 0V, I _D =250	60			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =60V, V _{GS} =0V	T _J =25		1	
			T _J =150		100	
Gate-Body Leakage Current	I _{GSS}	V _{GS} = W 20V, V _{DS} =0V			W 100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D =250	1.0	1.5	2.5	V
Static Drain-Source On-Resistance	R _{DS(ON)}	V _{GS} = 10V, I _D =20A		29	43	m
		V _{GS} = 4.5V, I _D =10A		31	47	
Diode Forward Voltage	V _{SD}	I _S =10A, V _{GS} =0V				



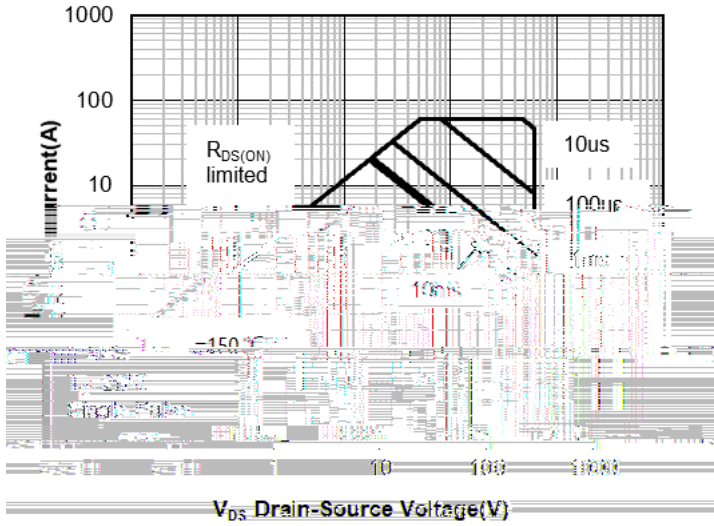


Figure 7. Safe Operation Area

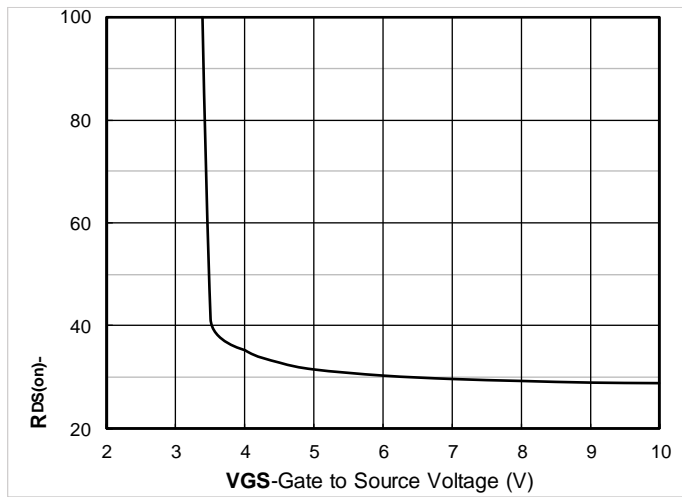


Figure 9. On-



