



YJR20N06A

N-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}	60V
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

Total Power Dissipation 370/F5 8Cf157



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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}	$V_{GS} \approx 20V, V_{DS}=0V$			≈ 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}	$I_S=10A, V_{GS}=0V$				



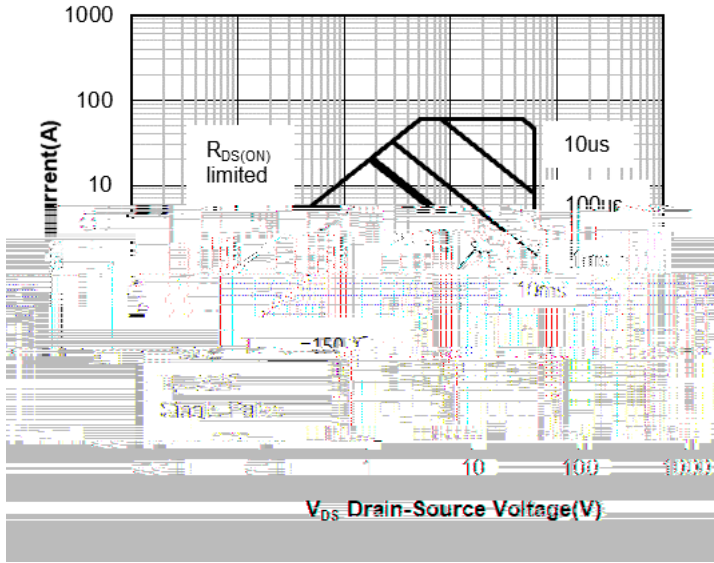


Figure 7. Safe Operation Area

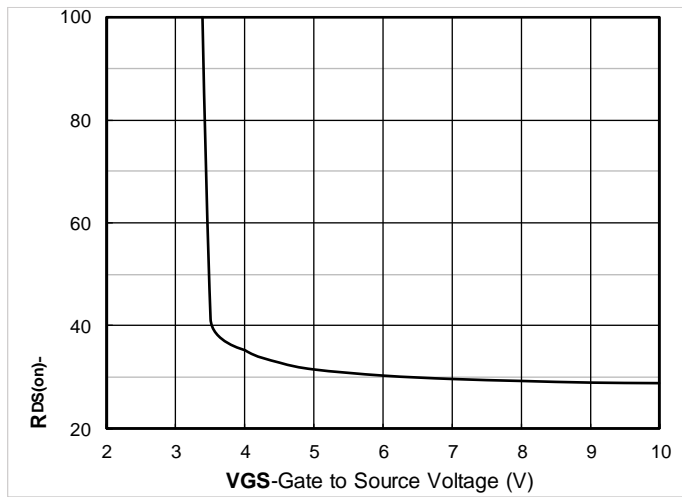


Figure 9. On-



