

JME708ND

30V N-Channel MOSFET

Features

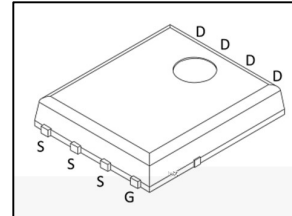
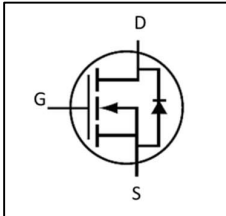
L R \bar{c} R L R R
 L R \bar{c} L R L L R L R
 \bar{c}
 L L L R R R



Product Summary	
	L

Applications

R
 R
 L R \bar{c} R R R \bar{c}
 R R \bar{c} L R \bar{c} R L L \bar{c} R



Ordering Information

Part Number	Marking	Package	Packaging
			L R RR

Absolute Maximum Ratings

Parameter	Symbol	Limit	Unit
L _{ct} R L R			
L R R L R			
ct L _{ct} R ct ct			
ct L _{ct} R ct ct			
ct L _{ct} R ct ct			
ct L _{ct} R ct ct			
C R L _{ct} R			
C R ct ct L ct	C		I
ctRL R L ct L			I
ct			
L L R			
ct R R L R			
L R R R L R			

Thermal Characteristics

Parameter	Symbol	Limit	Unit
ct O _{ct} R L R ct L R			
ct L R R L R ct L R			

Static Electrical Characteristics⁽⁹⁾

Parameter	Symbol	Max	Unit
L _{ct} R RL L R			

Dynamic Electrical Characteristics⁽⁶⁾

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
L L L R	T					
L L R L R						
L R R L R						
L R L C _t L R						
R L C _t R						
C _R C _t R						
π R L C _t R	π					
L C _t R	τ					
L L C _t R	C _t	T				
L L C _t R						
R R R L TR L L C _t R						

Diode Characteristics⁽⁶⁾

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
L L R						
R R R R R C _t R						
R R R R R L R	Y					

Typical Electrical Characteristics

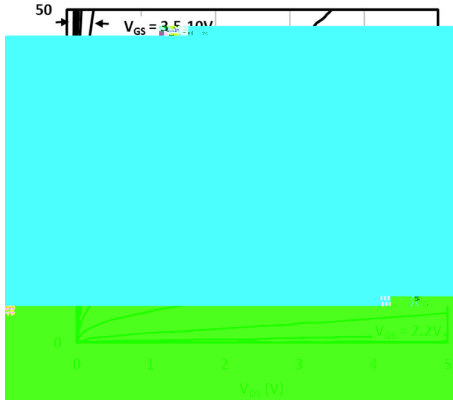


Fig 1 Output characteristics

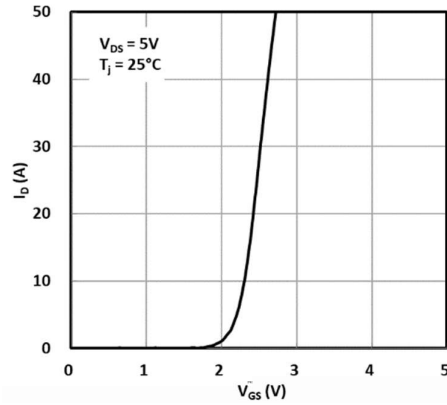


Fig 2 Transfer characteristics

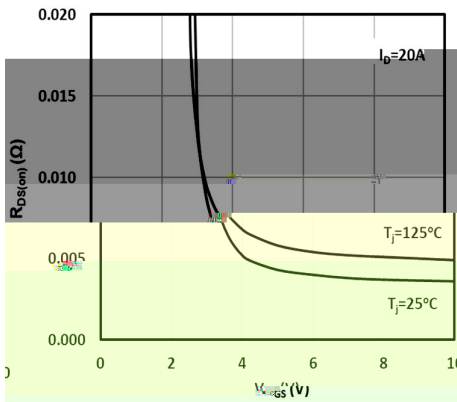


Fig 3 On-resistance vs gate voltage

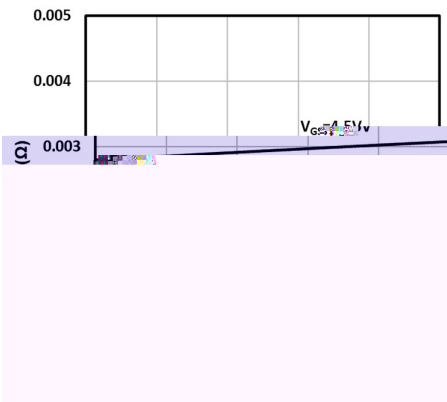


Fig 4 On-resistance vs drain current

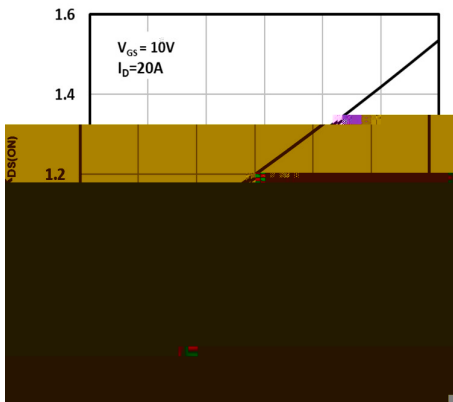


Fig 5 Normalized on-resistance vs temperature

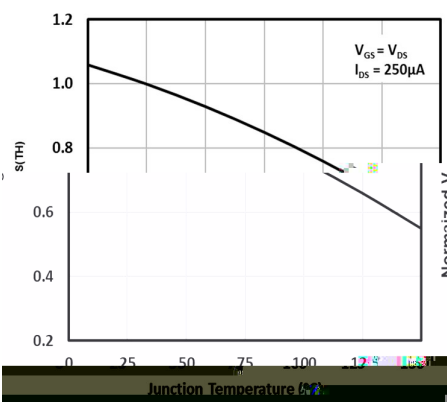


Fig 6 Normalized gate threshold voltage vs temperature

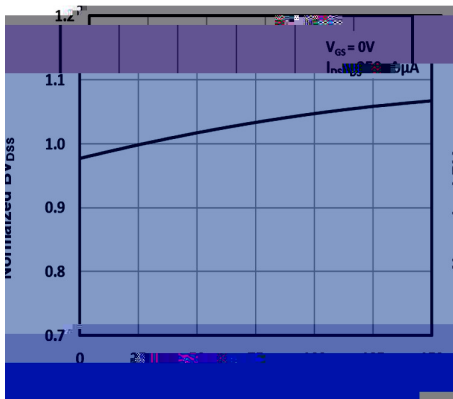


Fig 7 Normalized drain to source breakdown voltage vs temperature

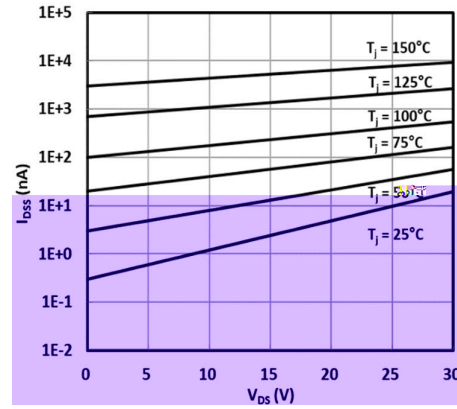


Fig 8 Drain to source leakage current vs voltage

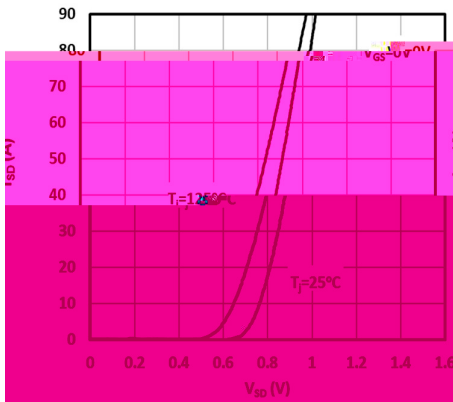


Fig 9 Source to drain diode forward characteristics

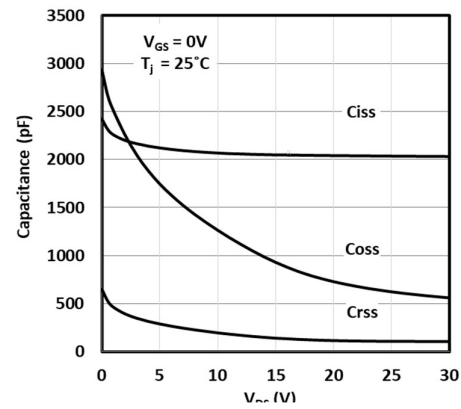


Fig 10 Capacitance vs drain to source voltage

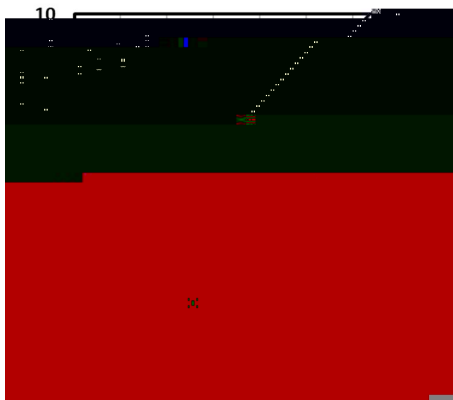


Fig 11 Gate to source voltage vs gate charge

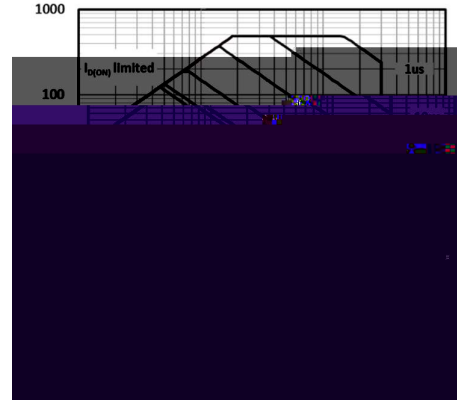


Fig 12 Safe operating area

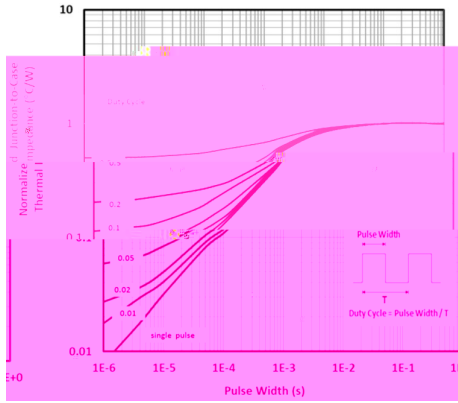


Fig 13 Inductance to case thermal impedance

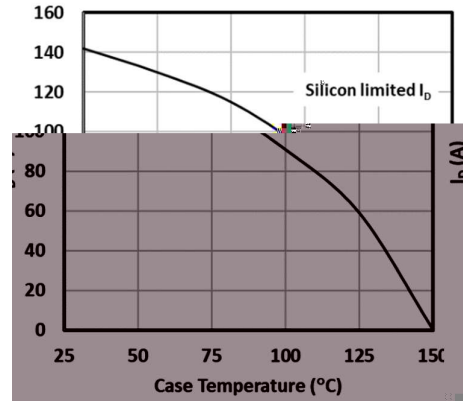


Fig 14 Maximum drain current vs case temperature

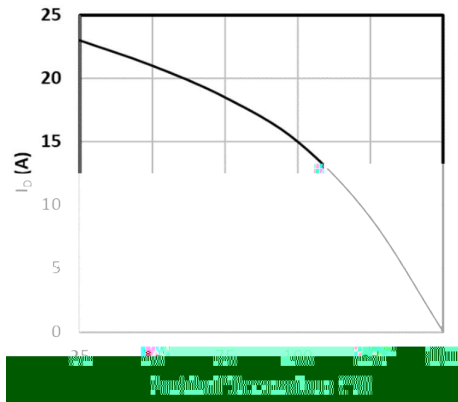
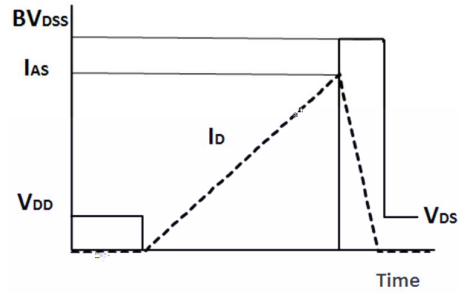
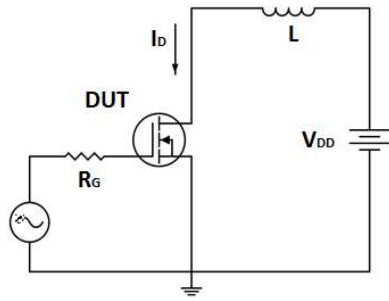


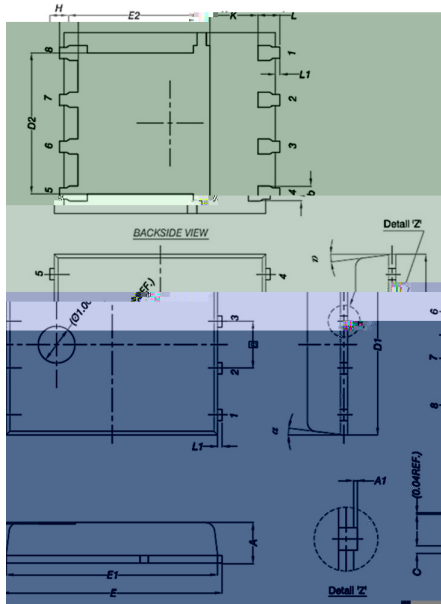
Fig 15 Maximum drain current vs ambient temperature

JMFCOSND



Undamped inductive switching test circuit & waveforms

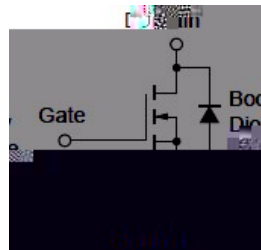
Package Drawing



MILLIMETERS			
	MIN.	NOM.	MAX.
A	0.90	1.00	1.10
A1	0	-	0.05
b	0.33	0.41	0.51
C	0.20	0.25	0.30
D1	4.80	4.90	5.00
D2	3.61	3.81	3.96
E	5.90	6.00	6.10
E1	5.70	5.75	5.80
E2	3.38	3.58	3.78
[C]	1.27 BSC		
H	0.41	0.51	0.61
K	1.10	-	-
L	0.51	0.61	0.71
L1	0.00	0.13	0.20
a	0°	-	12°

DN5.6

Equivalent Circuit



Revision history of JMEOSND specification

Version	Change Items	Effective Date
	<p> 1.1 R R L R </p>	<p>L</p>
	<p> R R 1.1 L 1.1 R Q L R 1.1 1.1 </p>	
	<p> L R C R L 1.1 R L R L L R 1.1 1.1 R R 1.1 R R R R L R L R L R L R R 1.1 1.1 </p>	<p>R</p>

Notice

General- T L ct ct ct R ct OR ct R OR L L R L R ct OR R R R ct R ct R L R R R L ct L L ct R R R ct ct L R L L R R R T ct L ct L L L R ct ct T R R R R T R T ct L ct

Right to be heard- R ct R R R R ct L R L R ct L ct O ct R ct ct R ct ct ct ct R ct ct L R ct ct L L ct R L ct ct R R R L R L R L ct L ct ct R O ct ct R R T

Suitability for use- R ct L R R ct R L ct R L L R OR ct OR T R ct R ct ct L ct L T L R ct R ct R ct L ct ct R R T L ct R L T ct T L R ct L R L LO OR R R R R ct R L ct R L R R R R R ct R L L R R ct R L L R R ct L R ct ct T ct ct L R T R ct ct R ct R L ct L ct L R R T R ct ct L R ct L R R ct

Applications- ct ct L L R R ct R R ct T L T R R L R T ct L ct R R ct L R R R R L ct L L L L ct ct ct OR ct OR T R R ct R ct T R R ct ct ct

Limiting values- R L O R R R ct ct L R L L R R L R L L R R R ct ct ct L R L R R L ct L R L ct T R R ct R L R R L R ct LO R R ct ct R L L R ct R ct T ct R ct ct ct R ct ct L R T R R R R ct L L T R R ct R ct ct ct

Terms and conditions of sale- R ct L R OR R R R L R L ct T R ct L R ct ct R R L ct L L ct R R L R ct ct R R L ct ct T ct R R R ct R ct R L R R ct ct O R ct L R T L ct ct T ct OR R R ct L ct ct R L R L ct R L R ct R L ct

No offer to sell or license- ct ct ct R L OR ct R R R R L L T R R L ct R T L R L R R L R L R ct ct ct T L ct R R L ct L R R ct ct ct R R L R ct

Export control- ct R L R L R ct R ct R R ct L OR OR R R L ct ct R ct L ct L ct T L ct L L ct

Quick reference data- R ct R R R L L ct L R L T R L L ct ct R ct ct L R L L L R ct ct R ct T ct R L L ct R R R L ct R L ct ct