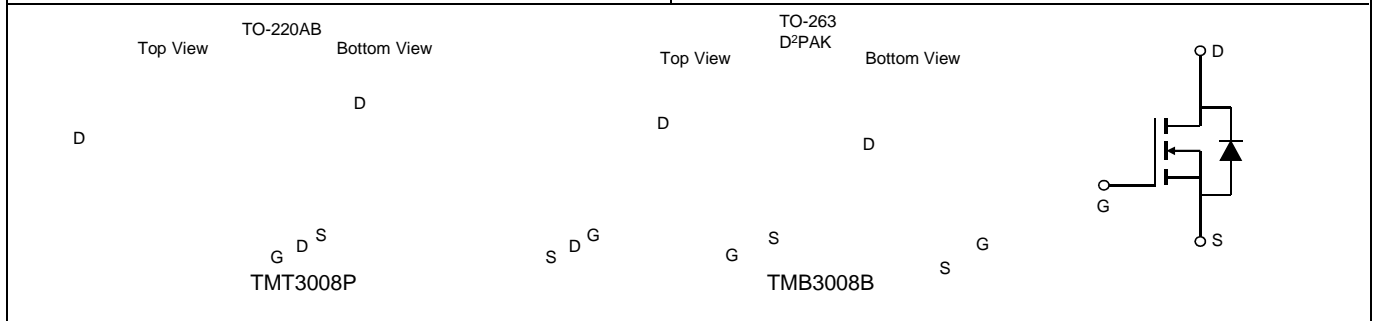


## TMT3008P / TMB3008B N-CHANNEL POWER MOSFET

<p><b>General Description</b></p> <ul style="list-style-type: none"> <li>z Switching application</li> <li>z Power management for inverter systems</li> </ul>	<p><b>Product Summary</b></p> <ul style="list-style-type: none"> <li>z 80V/100A</li> <li>z <math>R_{DS(ON)} = 6.6m</math> (typ.)@<math>V_{GS} = 10V</math></li> <li>z Reliable and Rugged</li> <li>z Lead- Free Devices Available (RoHS Compliant)</li> </ul> <p>100% UIS Tested 100% <math>R_g</math> Tested</p>
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### Absolute Maximum Ratings

Symbol	Parameter	Rating	Unit
<b>Common Ratings (T<sub>c</sub>=25°C Unless Otherwise Noted)</b>			
V <sub>DSS</sub>	Drain-Source Voltage	80	V
V <sub>GSS</sub>	Gate-Source Voltage	±25	V
T <sub>J</sub>	Maximum Junction Temperature	-55 to 175	°C
T <sub>STG</sub>	Storage Temperature Range	-55 to 175	°C
I <sub>S</sub>	Source Current-Continuous(Body Diode)	T <sub>c</sub> =25°C 100	A
<b>Mounted on Large Heat Sink</b>			
I <sub>DM</sub>	Pulsed Drain Current *	T <sub>c</sub> =25°C 400**	A
I <sub>D</sub>		T <sub>c</sub> =25°C 100	A
P <sub>D</sub>	Maximum Power Dissipation	T <sub>c</sub> =100°C 70	A
		T <sub>c</sub> =25°C 200	W
R <sub>θJC</sub>	Thermal Resistance, Junction-to-Case	100	W
R <sub>θJA</sub>	Thermal Resistance, Junction-to-Ambient **	0.75	°C/W
E <sub>AS</sub>	SinglePulsed-Avalanche Energy ***	L=0.3 mH 407***	mJ

Note: \* Repetitive rating; pulse width limited by max.junction temperature.  
 \*\* Surface mounted on 1in2 FR-4 board.  
 \*\*\* Limited by T<sub>Jmax</sub> , starting T<sub>J</sub>=25°C, L = 0.3mH, R<sub>G</sub>= 25Ω, V<sub>GS</sub>=10V.

62
127

23
39
55
33

$I_{D-Drain\ Current}(A)$

$I_{D-Drain\ Current}(A)$

Power Dissipation (w)

$R_{DS(ON)-ON-Resistance}(m\ \Omega)$

$Z_{\theta jc}$  Normalized Transient  
Thermal Impedance

$I_{D-Drain\ Current}(A)$

C-Capacitance(pF)

Normalized On-Resistance

$V_{GS}$ -Gate-Source Voltage (V)

$I_s$ -Source Current (A)



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