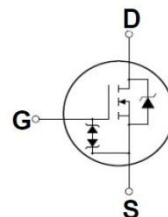


## Features

- Low gate charge
- 100% avalanche tested
- Improved dv/dt capability
- RoHS compliant
- Halogen free package
- JEDEC Qualification
- Improved ESD performance

N-channel MOSFET

$BV_{DSS}$	$I_D$	$R_{DS(on)}$
600V	7.5A	<1.2Ω



Device	Package	Marking	Remark
TMD8N60AZ / TMU8N60AZ	D-PAK/I-PAK	TMD8N60AZ / TMU8N60AZ	RoHS
TMD8N60AZG / TMU8N60AZG	D-PAK/I-PAK	TMD8N60AZG / TMU8N60AZG	Halogen Free

## Absolute Maximum Ratings

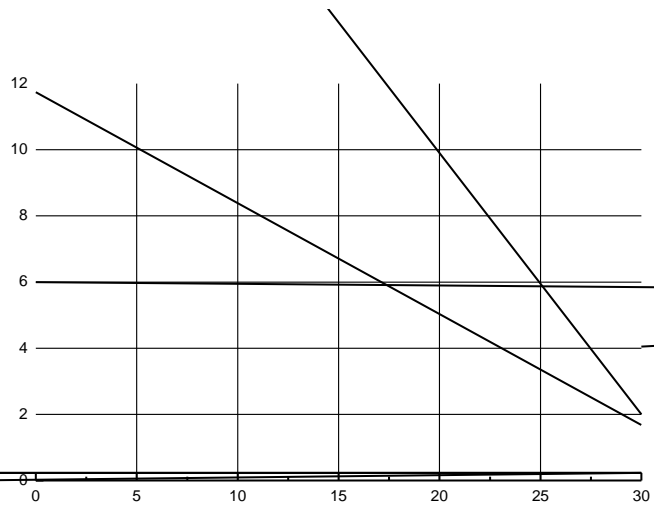
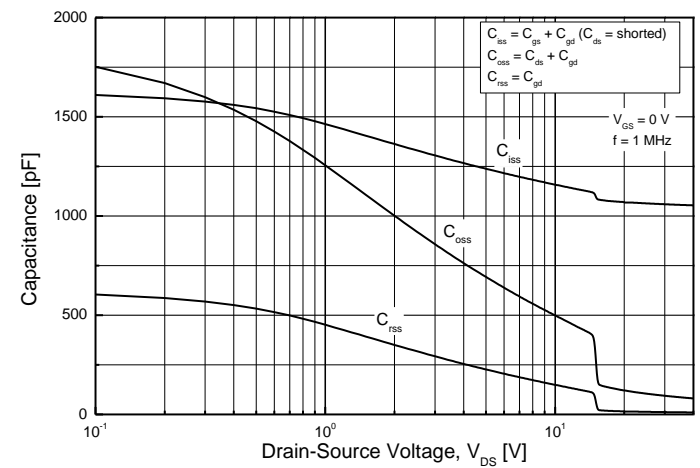
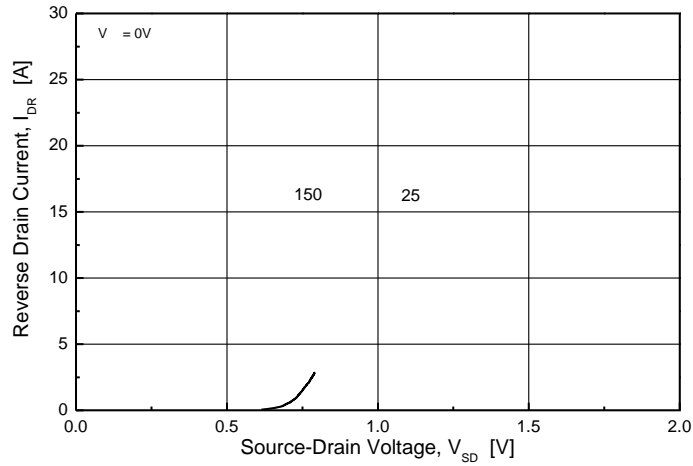
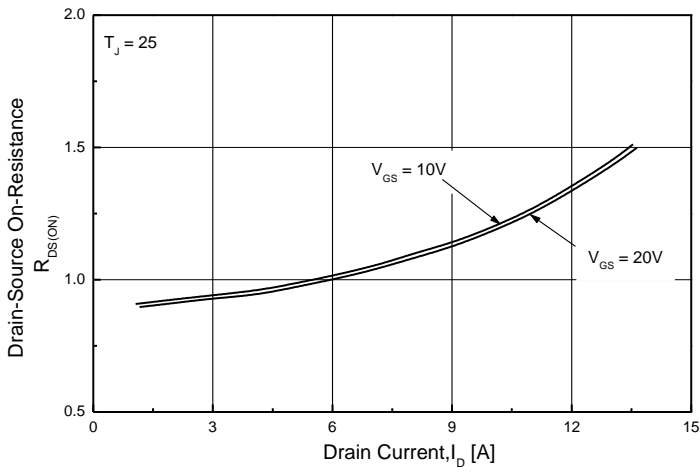
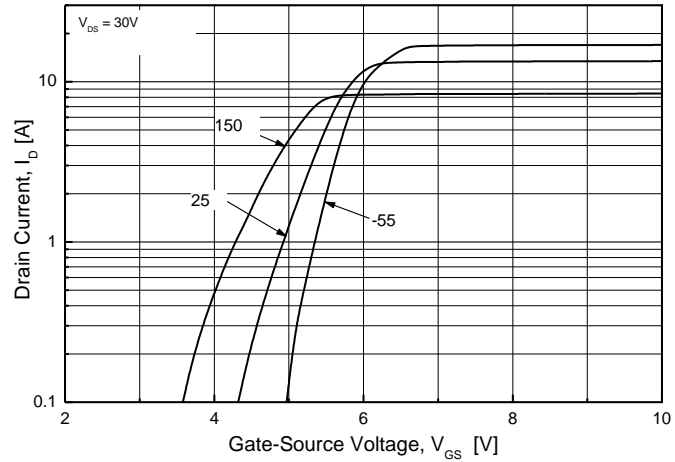
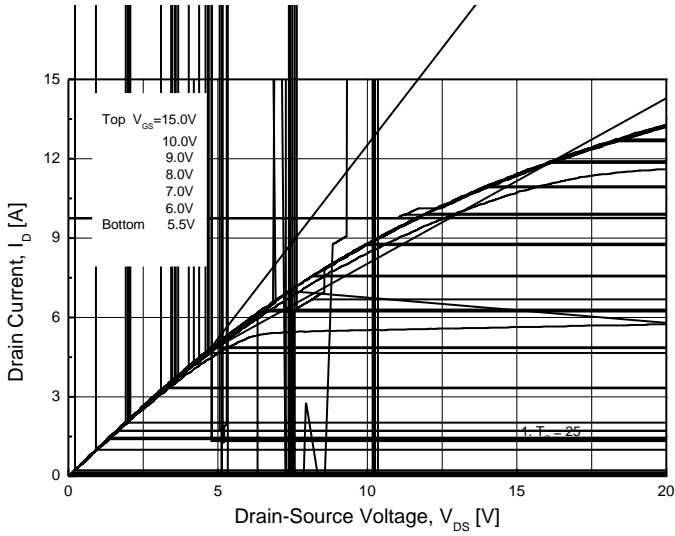
Parameter	Symbol	TMD8N60AZ(G)/TMU8N60AZ(G)	Unit
Drain-Source Voltage	$V_{DSS}$	600	V
Gate-Source Voltage	$V_{GS}$	30	V
Continuous Drain Current	$I_D$	$T_C = 25$	7.5
		$T_C = 100$	4.12
Pulsed Drain Current (Note 1)	$I_{DM}$	30	A
Single Pulse Avalanche Energy (Note 2)	$E_{AS}$	223	mJ
Repetitive Avalanche Current (Note 1)	$I_{AR}$	7.5	A
Repetitive Avalanche Energy (Note 1)	$E_{AR}$	12	mJ
Power Dissipation	$P_D$	$T_C = 25$	120
		Derate above 25	0.96
Peak Diode Recovery dv/dt (Note 3)	dv/dt	4.5	V/ns
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55~150	
Maximum lead temperature for soldering purposes,	$T_L$	300	

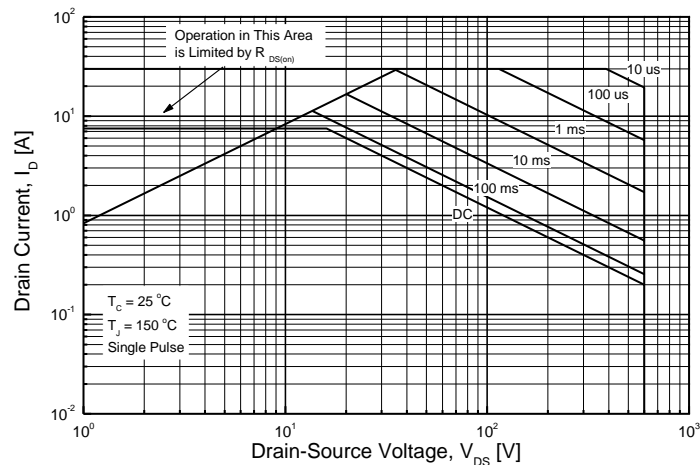
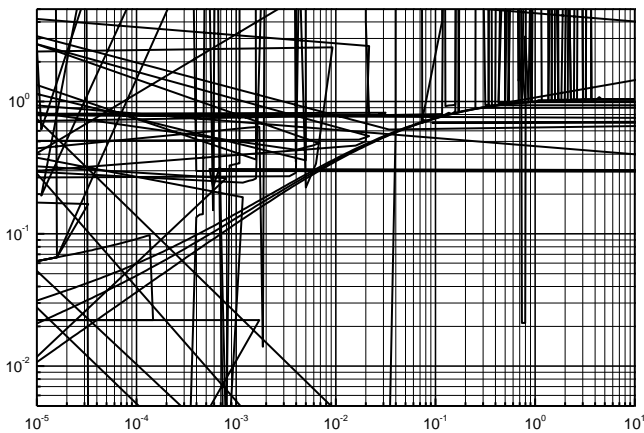
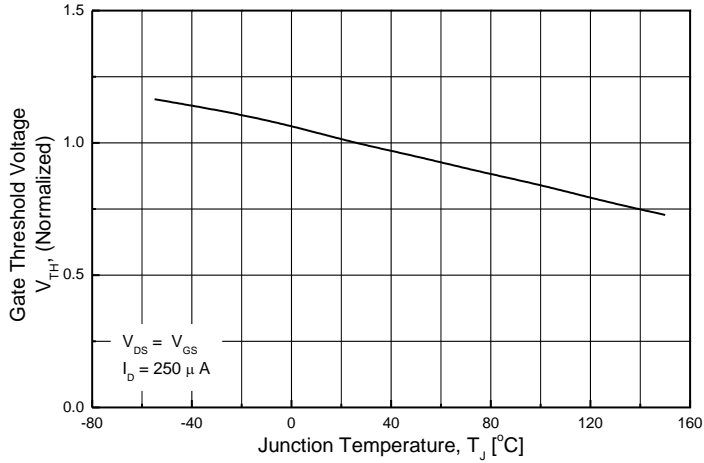
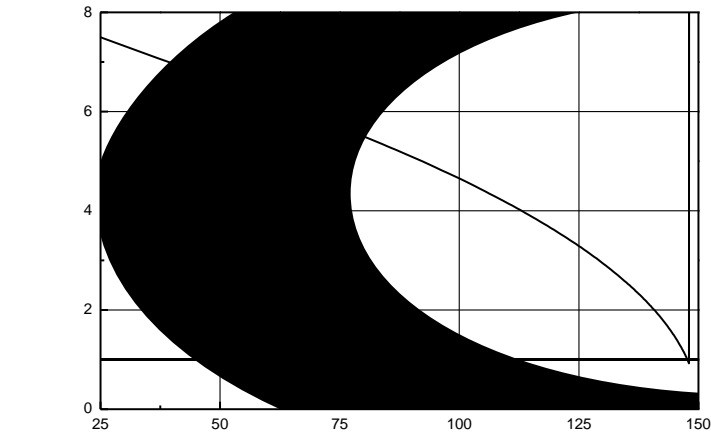
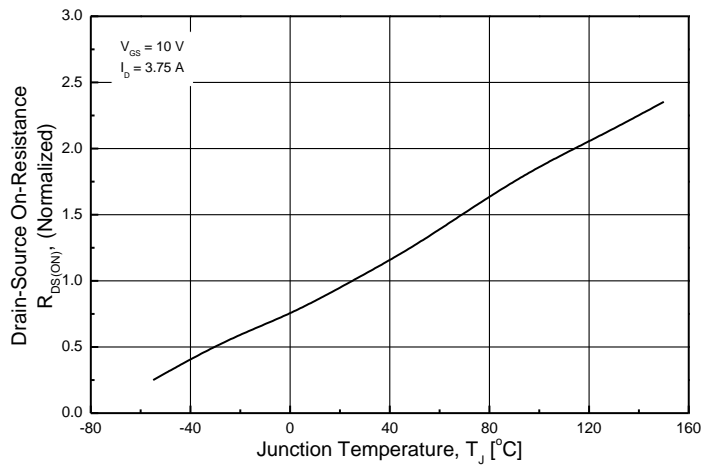
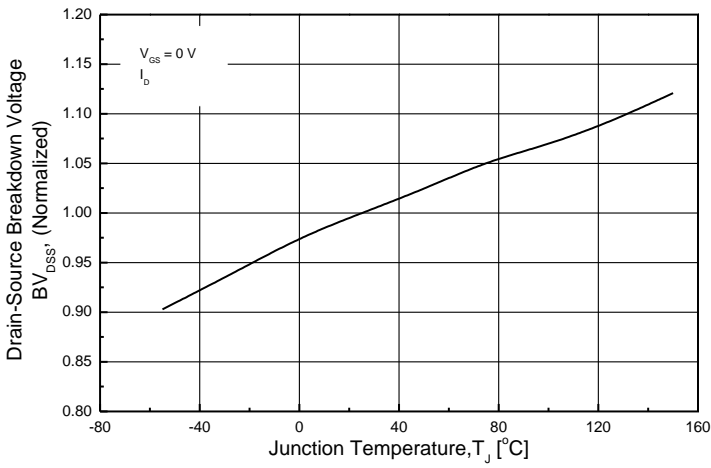
\* Limited only by maximum junction temperature

## Thermal Characteristics

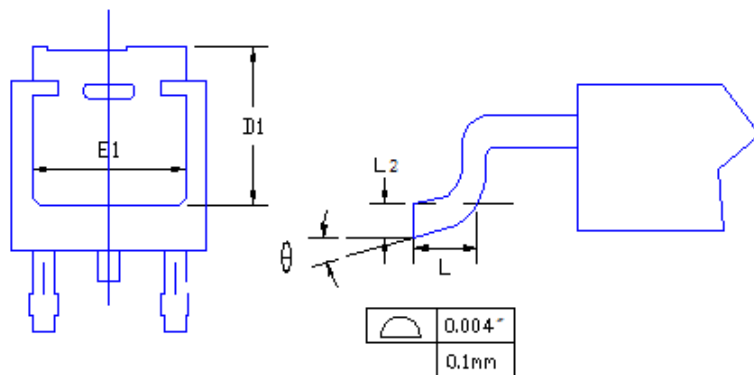
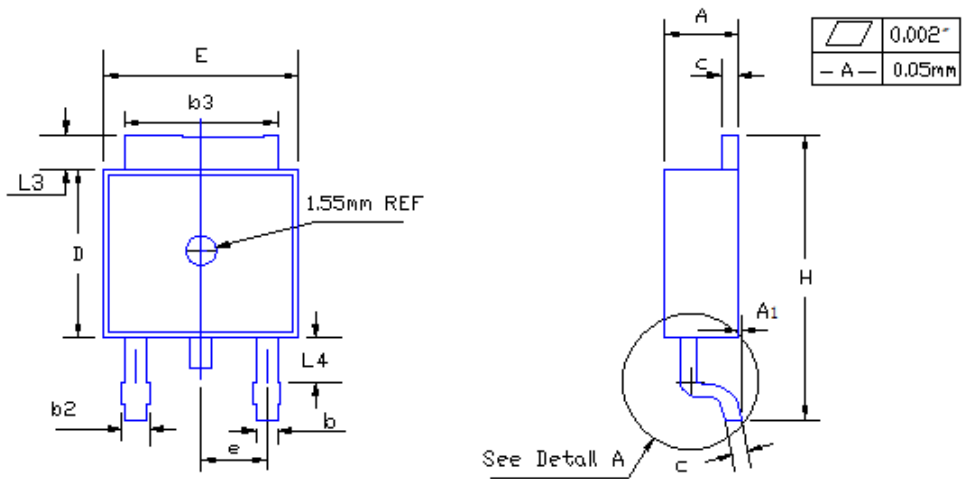
Parameter	Symbol	TMD8N60AZ(G)/TMU8N60AZ(G)	Unit
Maximum Thermal resistance, Junction-to-Case	$R_{\theta JC}$	1.04	/W
Maximum Thermal resistance, Junction-to-Ambient	$R_{\theta JA}$	110	/W







**TO-252 (D-PAK) MECHANICAL DATA**



SYMBOL	MILLIMETERS	
	MIN	MAX
A	2.19	2.38
A1	—	0.13
b	0.64	0.89
b2	0.84	1.14
b3	5.21	5.46
c	0.46	0.61
D	5.97	6.22
D1	5.21	—
E	6.35	6.73
E1	4.83	—
e	2.29BSC	
H	9.65	10.41
L	1.40	1.78
L2	0.51BSC	
L3	0.89	1.27
L4	0.64	1.01
⌀	0	8

**TO-251 (I-PAK) MECHANICAL DATA**



SYMBOL	MILLIMETERS	
	MIN	MAX
A	2.19	2.38
A1	1.04	1.23
b	0.64	0.89
b1	0.84	1.14
b2	5.23	5.48
c	0.46	0.61
D	5.91	6.28
E	6.21	6.59
e	2.28 TYP	
L	8.89	9.65
L2	0.89	1.27