

80V, 198A, 2.8m N-channel Power SGT MOSFET

JMSH0803RE

Product Summary

Parameters	Value	Unit
V_{DSS}	80	V
$V_{GS(th)}_{Typ}$	3.2	V
$I_D(@V_{GS}=10V)$	198	A
$R_{DS(ON)}_{Typ}(@V_{GS}=10V)$	2.8	m Ω

Ordering Information

Device	Marking	MSL	Form	Package	Reel(pcs)	Per Carton (pcs)
JMSH0803RE-13	SH0803R	3	Tape&Reel	TO-263-3L	800	4000

Absolute Maximum Ratings (@ $T_C = 25^\circ\text{C}$ unless otherwise specified)

Symbol	Parameter	Value	Unit
V_{DS}	Drain-to-Source Voltage	80	V
V_{GS}	Gate-to-Source Voltage		V
		$T_C = 25^\circ\text{C}$	A
		$T_C = 100^\circ\text{C}$	A
I_{DM}			A
E_{AS}			mJ
		$T_C = 25^\circ\text{C}$	W
		$T_C = 100^\circ\text{C}$	W
T_J, T_{STG}			$^\circ\text{C}$

Symbol	Unit
R	
R	

Electrical Characteristics ($T_J = 25^\circ\text{C}$ unless otherwise specified)

Symbol	Conditions	Min.	Typ.	Max.	Unit
Off Characteristics					
$V_{(BR)DSS}$		80	-	-	V
I_{DSS}		-	-	1.0	μA
I_{GSS}		-	-	± 100	nA
$V_{GS(th)}$		2.2	3.2	4.1	V
$R_{DS(ON)}$		-	2.8	3.6	$\text{m}\Omega$
R_g		-	2.5	-	Ω
C_{iss}		-	6508	9762	pF
C_{oss}		-	1198	1797	pF
C_{rss}		-	30	60	pF
Q_g		-	93	-	nC
Q_{gs}		-	-	-	



Typical Performance Characteristics

Figure 1: Power De-rating

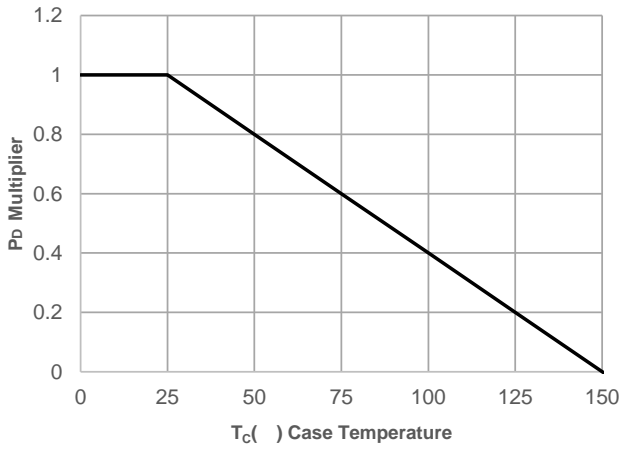
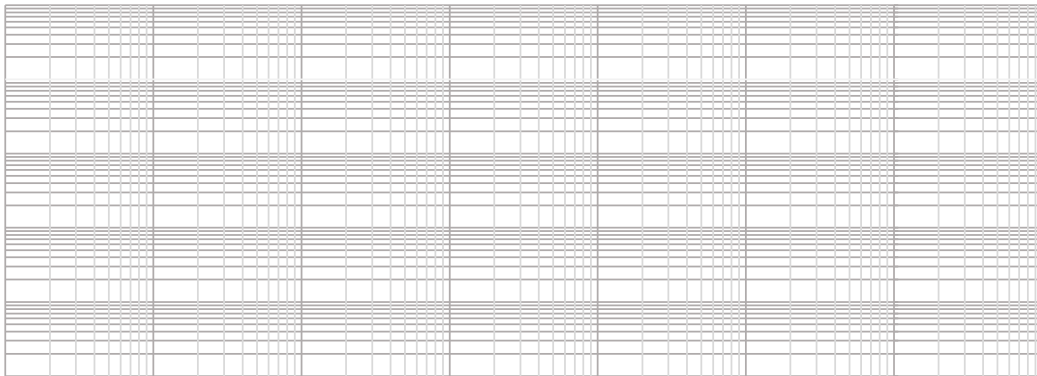
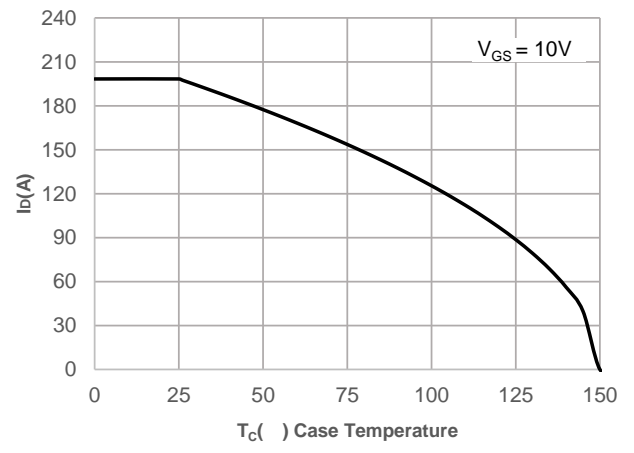
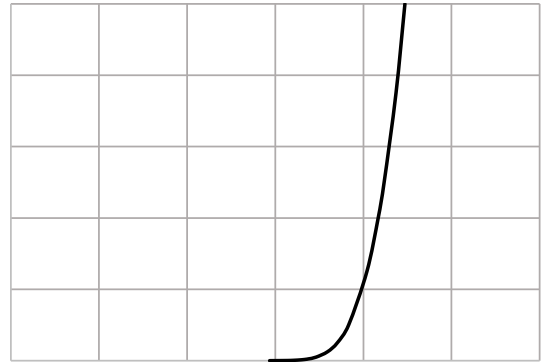
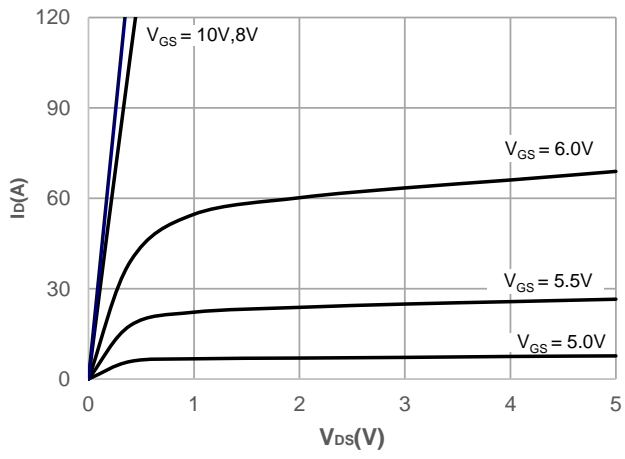


Figure 2: Current De-rating

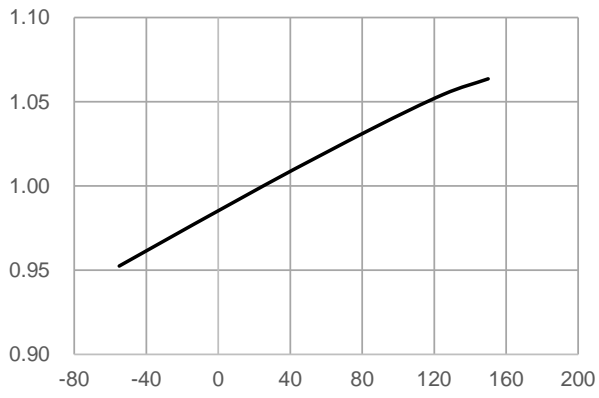


Typical Performance Characteristics

Figure 5: Output Characteristics



Typical Performance Characteristics



Test Circuit

Figure 1: Gate Charge Test Circuit & Waveform

Package Mechanical Data(TO-263-3L)

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