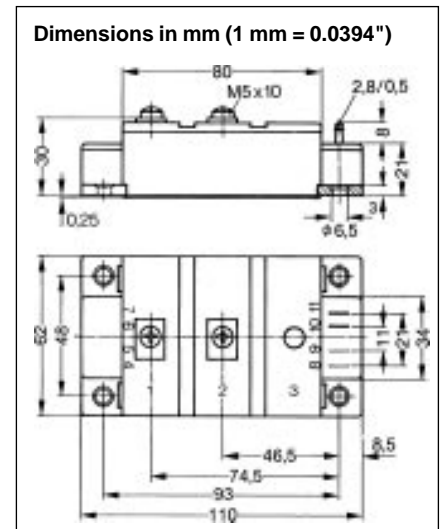


Symbol	Test Conditions	Characteristic			Values specified
		min.	typ.	max.	
		($T_J = 25^\circ\text{C}$, unless otherwise specified)			
g_{fs}	$V_{DS} = 10\text{V}; I_D = 0.5 \cdot I_{D25}$ pulsed		TBD		S
C_{iss}	} $V_{GS} = 0\text{V}, V_{DS} = 25\text{V}, f = 1 \text{ MHz}$		48		nF
C_{oss}			8.8		nF
C_{rss}			3.1		nF
$t_{d(on)}$	} $V_{GS} = 10\text{V}, V_{DS} = 0.5 \cdot V_{DSS}, I_D = 0.5 \cdot I_{D25}$ $R_G = 1 \ \Omega$ (External)		210		ns
t_r			500		ns
$t_{d(off)}$			900		ns
t_f			350		ns
Q_g	} $V_{GS} = 10\text{V}, V_{DS} = 0.5 \cdot V_{DSS}, I_D = 0.5 \cdot I_{D25}$		2090		nC
Q_{gs}			385		nC
Q_{gd}			1045		nC
R_{thJC}					0.056 K/W
R_{thJK}	with 30 μm heat transfer paste				0.083 K/W



Source-Drain Diode		Characteristic			Values specified
Symbol	Test Conditions	min.	typ.	max.	
		($T_J = 25^\circ\text{C}$, unless otherwise specified)			
I_S	$V_{GS} = 0$			385	A
I_{SM}	Repetitive; pulse width limited by T_{JM}			1540	A
V_{SD}	$I_F = I_S; V_{GS} = 0\text{V}$, Pulse test, $t \leq 300 \mu\text{s}$, duty cycle $d \leq 2\%$		0.9	1.2	V
t_{rr}	$I_F = I_S, -di/dt = 1200 \text{ A/}$				

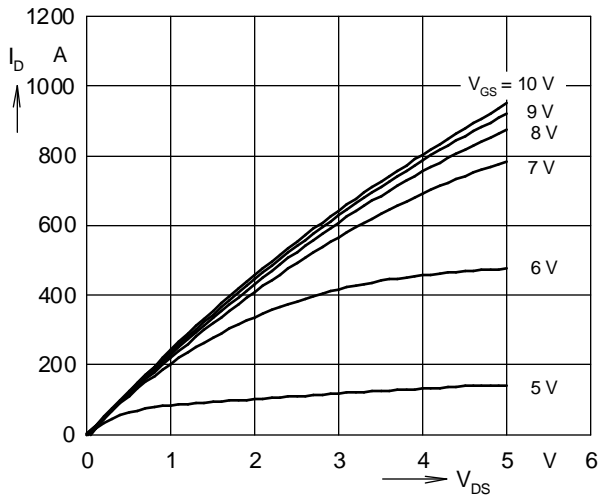


Fig. 1 Typical output characteristics $I_D = f(V_{DS})$

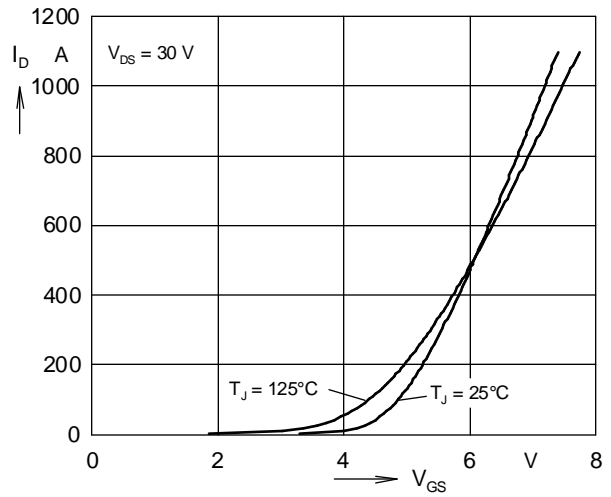


Fig. 2 Typical transfer characteristics $I_D = f(V_{GS})$

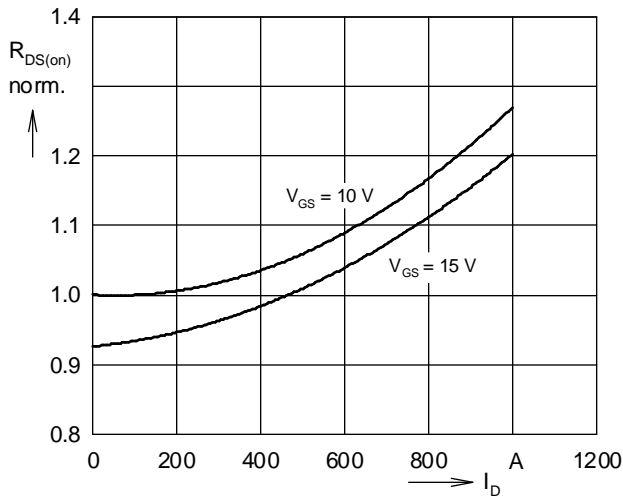


Fig. 3 Typical $R_{DS(on)} = f(I_D)$, normalized

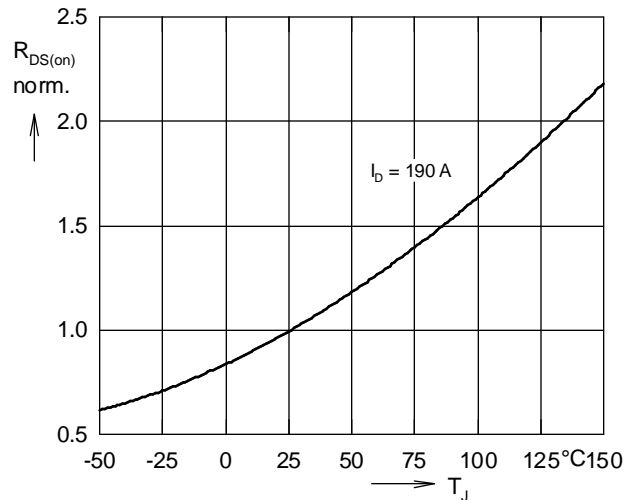


Fig. 4 $R_{DS(on)} = f(T_J)$, normalized

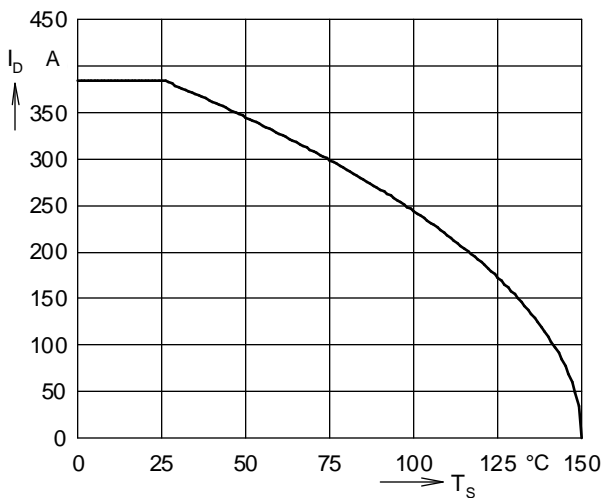


Fig. 5 Continuous drain current $I_D = f(T_k)$

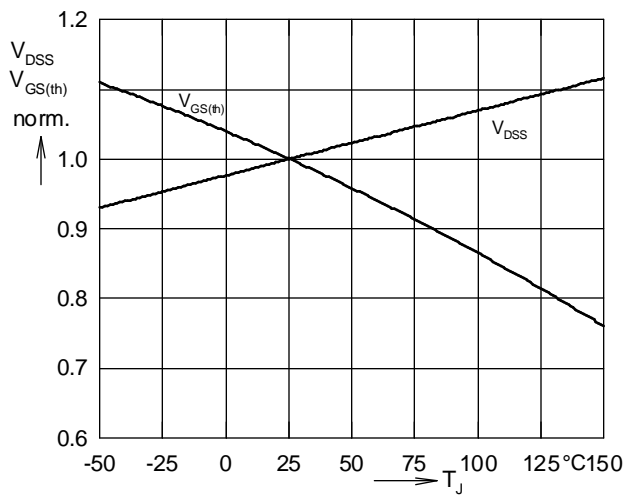


Fig. 6 $V_{DS} = f(T_J)$, $V_{GS(th)} = f(T_J)$, normalized

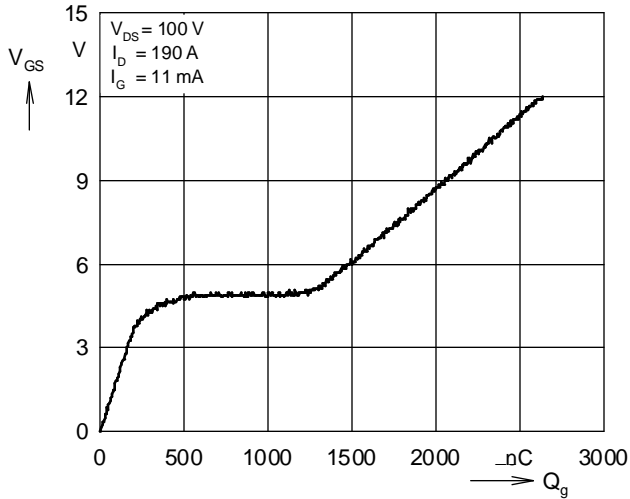


Fig. 7 Typical turn-on gate charge characteristics

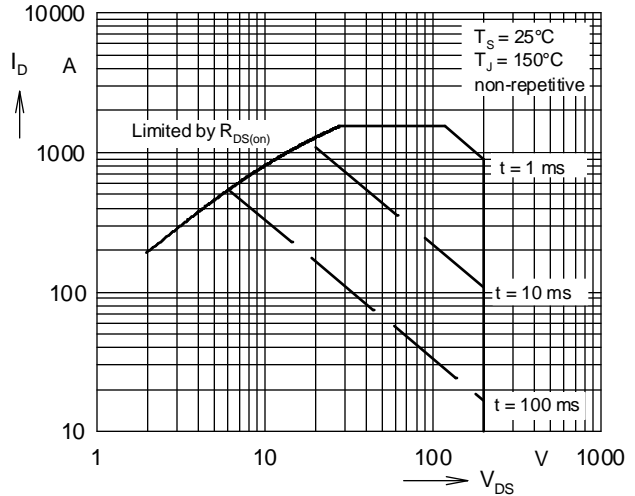
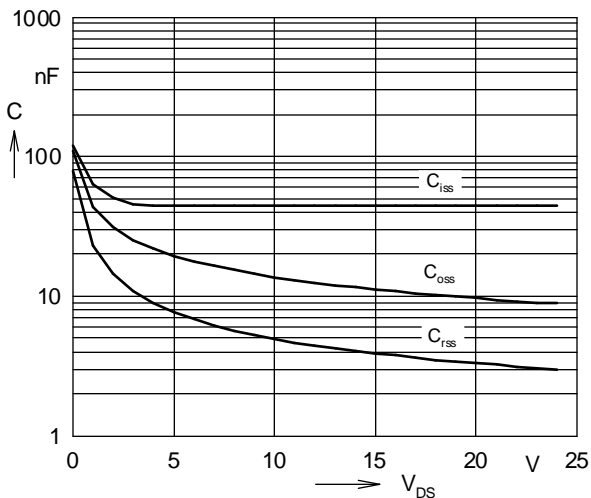
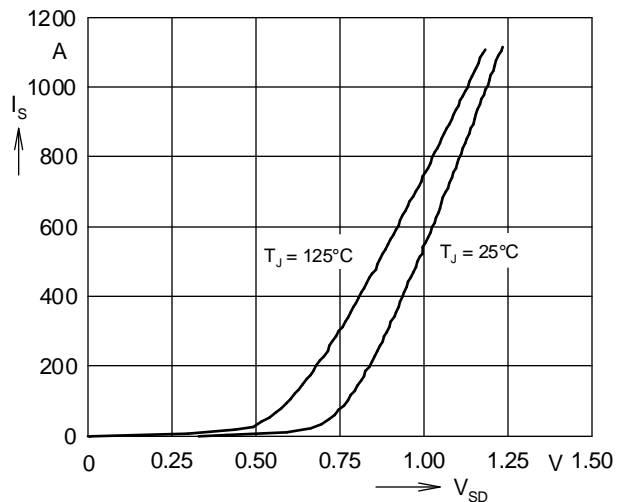
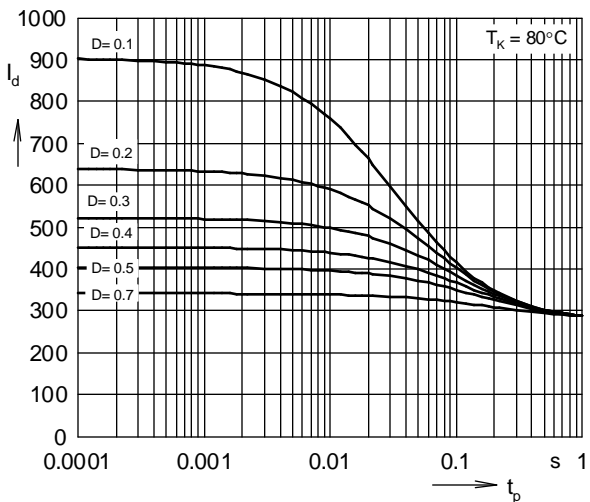
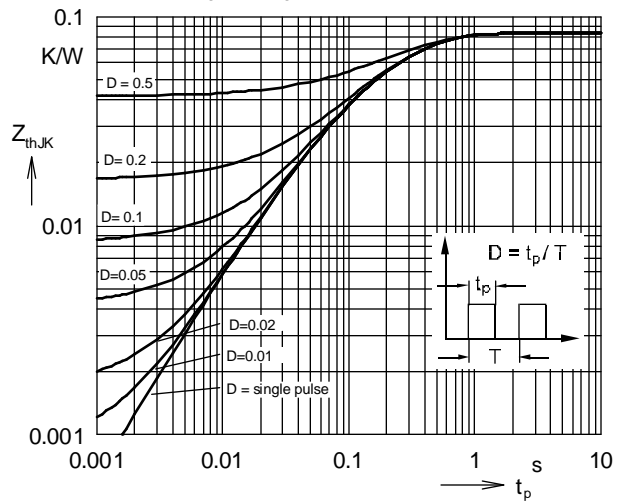

 Fig. 8 Forward Bias Safe Operating Area, $I_D = f(V_{DS})$

 Fig. 9 Typical capacitances $C = f(V_{DS})$, $f = 1 \text{ MHz}$

 Fig. 10 Typical forward characteristics of reverse diode, $I_S = f(V_{SD})$


Fig. 11 Drain current versus pulse width and duty cycle


 Fig. 12 Transient thermal resistance $Z_{thJK} = f(t_p)$