

Ratings

Collector-Emitter Voltage	1200	V
Continuous Drain Current	100	A
Operating Temperature	175	°C

Electrical Characteristics

Parameters	Symbol	Conditions	Value			Unit
			Min	Typ	Max	

On characteristics

Collector-Emitter On-resistance	R_{DSon}	$I_D=40\text{ A}, V_{GS}=20\text{V}, T_j=25^\circ\text{C}$	-	0.015	-	Ω
		$I_D=40\text{ A}, V_{GS}=20\text{V}, T_j=75^\circ\text{C}$	-	0.016	-	Ω
		$I_D=40\text{ A}, V_{GS}=20\text{V}, T_j=100^\circ\text{C}$	-	0.0144	-	Ω
		$I_D=40\text{ A}, V_{GS}=20\text{V}, T_j=150^\circ\text{C}$	-	0.0163	-	Ω

Switching characteristics

Total Switching Energy	E_{ts}	$V_{DS}=600\text{V}, I_D=100\text{A},$ Inductive load, $T_j=25^\circ\text{C}$ $V_{gs}=20\text{V}$	-	7.8	-	mJ
Total Switching Energy	E_{ts}	$V_{DS}=600\text{V}, I_D=100\text{ A},$ Inductive load, $T_j=100^\circ\text{C}$ $V_{gs}=20\text{V}$	-	6.9	-	mJ
Total Switching Energy	E_{ts}	$V_{DS}=400\text{V}, I_D=100\text{ A},$ Inductive load, $T_j=25^\circ\text{C}$ $V_{gs}=20\text{V}$	-	4.9	-	mJ
Total Switching Energy	E_{ts}	$V_{DS}=400\text{V}, I_D=100\text{ A},$ Inductive load, $T_j=75^\circ\text{C}$ $V_{gs}=20\text{V}$	-	4.8	-	mJ
Total Switching Energy	E_{ts}	$V_{DS}=400\text{V}, I_D=100\text{ A},$ Inductive load, $T_j=25^\circ\text{C}$ $V_{gs}=20\text{V}$	-	4.9	-	mJ

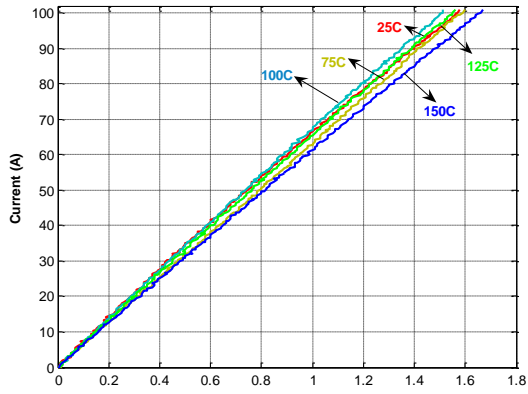


Fig.1: i-v curves

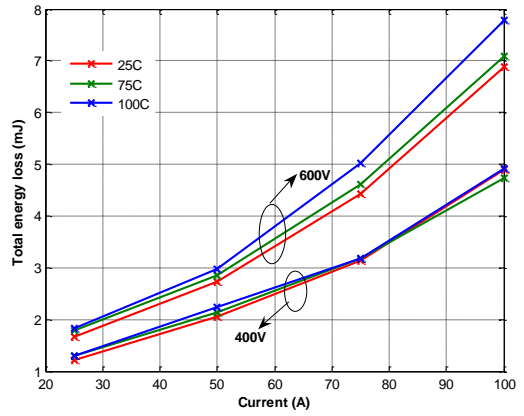


Fig.2: Switching Energy Losses