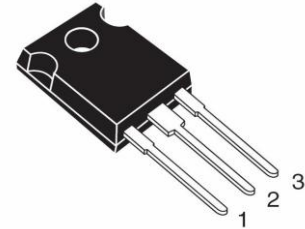


Ratings

Collector-Emitter Voltage	1200	V
Continuous Drain Current	50	A
Operating Temperature	175	°C



Electrical Characteristics

Parameters	Symbol	Conditions	Value			Unit
			Min	Typ	Max	

On characteristics

Collector-Emitter On-resistance	R_{CEon}	$I_D=6\text{ A}, V_{gs}=3\text{ V}, T_j=25^\circ\text{C}$	-	0.042	-	Ω
		$I_D=6\text{ A}, V_{gs}=3\text{ V}, T_j=175^\circ\text{C}$	-	0.125	-	Ω

Off characteristics

Collector-Emitter Blocking Voltage	BV_{CE}		1200	-	-	V
Total Collector Leakage Current	I_{CSS}	$V_{DS}=600\text{ V}, V_{gs}=0\text{ V}, T_j=25^\circ\text{C}$	-	37	-	μA
		$V_{DS}=600\text{ V}, V_{gs}=0\text{ V}, T_j=150^\circ\text{C}$	-	46	-	μA

Switching characteristics

Total Switching Energy	E_{ts}	$V_{DS}=600\text{ V}, I_D=25\text{ A},$ Inductive load, $T_j=150^\circ\text{C}$ $V_{gs}=3\text{ V}$	-	720	-	μJ
Total Switching Energy	E_{ts}	$V_{DS}=600\text{ V}, I_D=25\text{ A},$ Inductive load, $T_j=150^\circ\text{C}$ $V_{gs}=3\text{ V}$	-	830	-	μJ

Total Switching Energy	E_{ts}	$V_{DS}=400\text{ V}, I_D=25\text{ A},$ Inductive load, $T_j=150^\circ\text{C}$ $V_{gs}=3\text{ V}$	-	400	-	μJ
Total Switching Energy	E_{ts}	$V_{DS}=400\text{ V}, I_D=25\text{ A},$ Inductive load, $T_j=150^\circ\text{C}$ $V_{gs}=3\text{ V}$	-	500	-	μJ

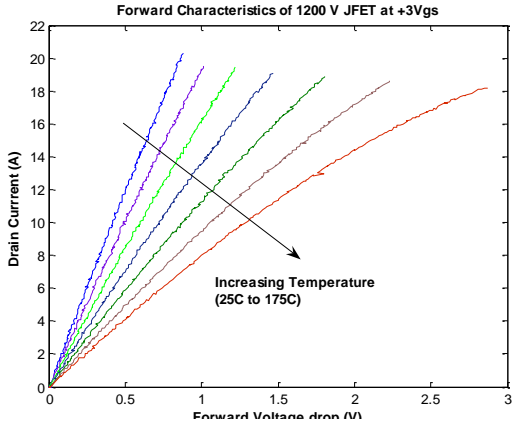


Figure 1: i-v curves

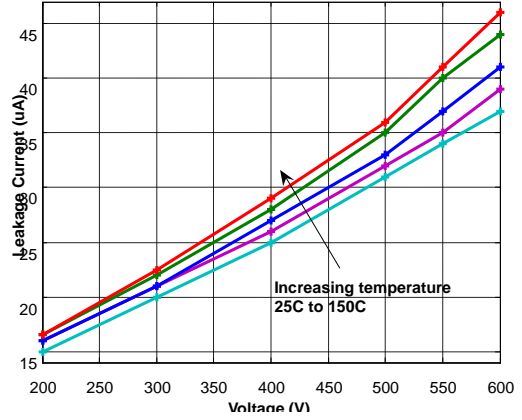


Figure 2: Leakage Current

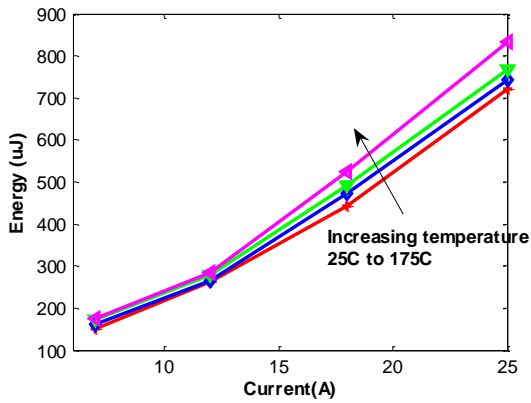


Figure 3: Total switching energy losses at 600 V

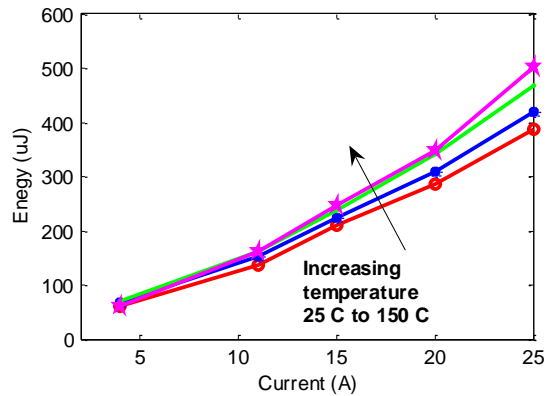


Figure 4: Total switching energy losses at 400 V