

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

Forward Voltage	V_F	$T_j=25^\circ\text{C}$	-	0.82	-	V
		$T_j=175^\circ\text{C}$	-	0.64	-	V

Switching characteristics

Turn-off Energy	E_{off}	$V_{AK}=400\text{V},$ $I_F=100\text{ A},$ Inductive load,	$T_j=25^\circ\text{C}$	-	35	-	μJ
			$T_j=150^\circ\text{C}$	-	34.5	-	μJ
Turn-off Energy	E_{off}	$V_{AK}=600\text{V},$ $I_F=100\text{ A},$ Inductive load	$T_j=25^\circ\text{C}$	-	130	-	μJ
			$T_j=150^\circ\text{C}$	-	135	-	μJ

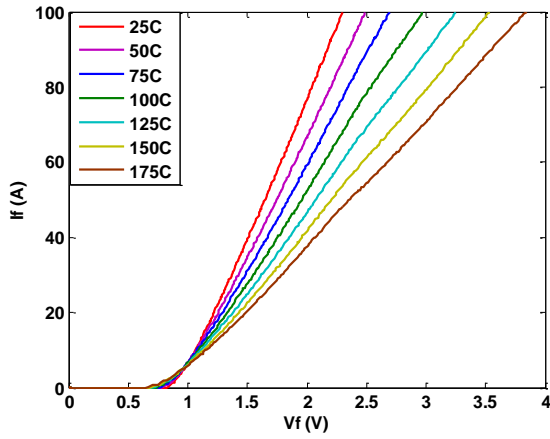


Fig. 1. Forward characteristic of 1,200 V, 35 A JBS diode.

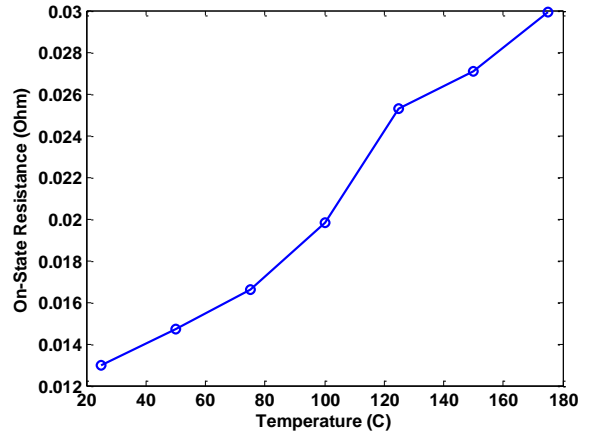


Fig. 2. On-state resistance of 1,200 V, 35 A JBS diode.

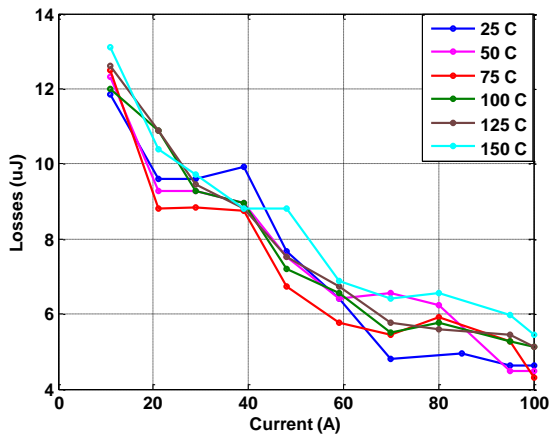


Fig. 3. Energy losses at 200 V.

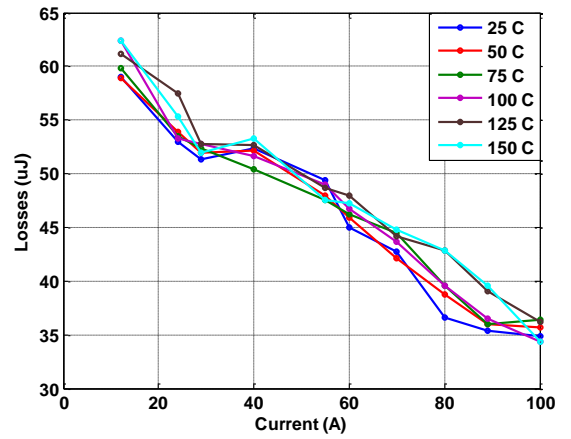


Fig. 4. Energy losses at 400 V.

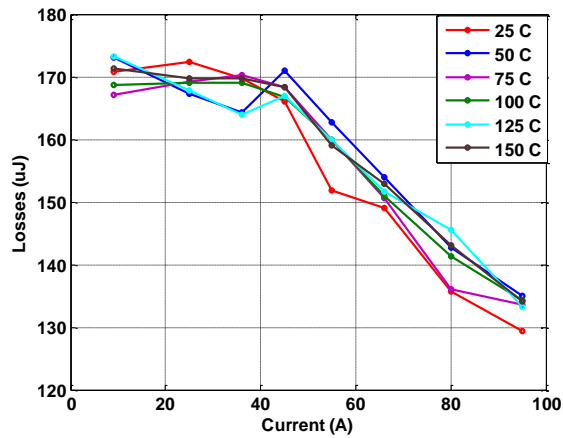


Fig. 5. Energy losses at 600 V.