



Symbol	Conditions	Characteristic Values ( $T_{VJ} = 25^{\circ}\text{C}$ , unless otherwise specified)		
		min.	typ.	max.
$I_R$	$V_R = V_{RRM}, T_{VJ} = 25^{\circ}\text{C}$			0.1 mA
	$V_R = V_{RRM}, T_{VJ} = 150^{\circ}\text{C}$			2 mA
$V_F$	$I_F = 80 \text{ A}, T_{VJ} = 25^{\circ}\text{C}$	VUB 116		1.43 V
	$I_F = 150 \text{ A}, T_{VJ} = 25^{\circ}\text{C}$	VUB 145		1.68 V
$V_{T0}$	for power-loss calculations only	VUB 116		0.85 V
$r_T$	$T_{VJ} = 150^{\circ}\text{C}$	VUB 145		0.85 V
		VUB 116		7.1 m $\Omega$
$R_{thJC}$	per diode	VUB 116		0.65 K/W
		VUB 145		0.5 K/W
$R_{thCH}$		VUB 116		0.1 K/W
		VUB 145		0.1 K/W
$V_{BR(CES)}$	$V_{GS} = 0 \text{ V}, I_C = 0.1 \text{ mA}$		1200	V
$V_{GE(th)}$	$I_C = 8 \text{ mA}$	VUB 116	4.5	6.45 V
	$I_C = 3 \text{ mA}$	VUB 145	4.5	6.45 V
$I_{CES}$	$T_{VJ} = 25^{\circ}\text{C}, V_{CE} = 1200 \text{ V}$			0.1 mA
	$T_{VJ} = 125^{\circ}\text{C}, V_{CE} = 0.8 \cdot V_{CES}$			0.5 mA
$V_{CEsat}$	$V_{GE} = 15 \text{ V}, I_C = 100 \text{ A}$	VUB 116		3.5 V
	$V_{GE} = 15 \text{ V}, I_C = 150 \text{ A}$	VUB 145		3.7 V
$t_{SC}(SCSOA)$	$V_{GE} = 15 \text{ V}, V_{CE} = 720 \text{ V}, T_{VJ} = 125^{\circ}\text{C}$ ,			10 $\mu\text{s}$
RBSOA	$V_{GE} = 15 \text{ V}, V_{CE} = 1200 \text{ V}, T_{VJ} = 125^{\circ}\text{C}$ , clamped inductive load, $L = 100 \mu\text{H}$	$R_G = 22 \Omega$	VUB 116	100 A
		$R_G = 15 \Omega$	VUB 145	150 A
$C_{ies}$	$V_{CE} = 25 \text{ V}, f = 1 \text{ MHz}, V_{GE} = 0 \text{ V}$	VUB 116	3.8	nF
		VUB 145	5.7	nF
$t_{d(on)}$	$V_{CE} = 720 \text{ V}, I_C = 50/75 \text{ A}$ $V_{GE} = 15 \text{ V}, R_G = 32/15 \Omega$ Inductive load; $L = 100 \mu\text{H}$ $T_{VJ} = 125^{\circ}\text{C}$			150 ns
$t_{d(off)}$				680 ns
$E_{on}$		VUB 116	6	mJ
$E_{off}$		VUB 145	9	mJ
		VUB 116	5	mJ
VUB 145	7.5	mJ		
$R_{thJC}$		VUB 116		0.33 K/W
		VUB 145		0.22 K/W
$R_{thJH}$		VUB 116		0.66 K/W
		VUB 145		0.44 K/W
$I_R$	$V_R = V_{RRM}, T_{VJ} = 25^{\circ}\text{C}$			0.25 mA
	$V_R = 1200 \text{ V}, T_{VJ} = 125^{\circ}\text{C}$		1	mA
$V_F$	$I_F = 30 \text{ A}, T_{VJ} = 25^{\circ}\text{C}$			2.76 V
$V_{T0}$	For power-loss calculations only			1.3 V
$r_T$	$T_{VJ} = 150^{\circ}\text{C}$			16 m $\Omega$
$I_{RM}$	$I_F = 50 \text{ A}, -di_F/dt = 100 \text{ A}/\mu\text{s}, V_R = 100 \text{ V}$		5.5	11 A
$t_{rr}$	$I_F = 1 \text{ A}, -di_F/dt = 200 \text{ A}/\mu\text{s}, V_R = 30 \text{ V}$		40	ns
$R_{thJC}$				0.9 K/W
$R_{thCH}$				0.1 K/W
$R_{25}$		4.75	5.0	5.25 k $\Omega$
$B_{25/50}$			3375	K