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Gate-Emitter Threshold Voltage

V_V



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Repetitive Peak Reverse Voltage	V_{RRM}	$T_{vj}=25$	1200	V
Continuous DC Forward Current	I_F		35	A
Repetitive Peak Forward Current	I_{FRM}	$t_p=1ms$	70	A
I ² t-value	I ² t	$V_R=0V, t_p=10ms, T_{vj}=125$	240	A ² s
		$V_R=0V, t_p=10ms, T_{vj}=150$	220	

Forward Voltage	V_F	$I_F=35A, T_{vj}=25$		2.1	2.50	V
		$I_F=35A, T_{vj}=125$		2.2		
		$I_F=35A, T_{vj}=150$		2.2		
Recovered Charge Peak R	Q_{rr}	$I_F = 35 A$ $V_R=600V$ $-di_F/dt = 900A/us$ $T_{vj}=25$		3.95		uC



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Turn-on Delay Time	$t_{d(on)}$	$I_C=35\text{ A}$ $V_{CE}=600\text{ V}$ $V_{GE}=\pm 15\text{ V}$ $R_G=12\Omega$ $T_{vj}=125$		25		ns
Rise Time	t_r			16		ns
Turn-off Delay Time	$t_{d(off)}$			295		ns
Fall Time	t_f			170		ns
Energy Dissipation During Turn-on Time	E_{on}			2.90		mJ
Energy Dissipation During Turn-off Time	E_{off}			2.90		mJ
SC Data	I_{SC}		$t_p \leq 10\mu\text{s}, V_{GE}=15\text{ V}, T_{vj}=150$, $V_{CC}=900\text{ V}, V_{CEM} \leq 1200\text{ V}$		150	

Repetitive Peak Reverse Voltage	V_{RRM}	$T_{vj}=25$		1200		V
Continuous DC Forward Current	I_F			15		A
Repetitive Peak Forward Current	I_{FRM}	$t_p=1\text{ ms}$		30		A
Rt-value	I^2t	$V_R=0\text{ V}, t_p=10\text{ ms}, T_{vj}=125$		16.0		A ² s
		$V_R=0\text{ V}, t_p=10\text{ ms}, T_{vj}=150$		14.0		

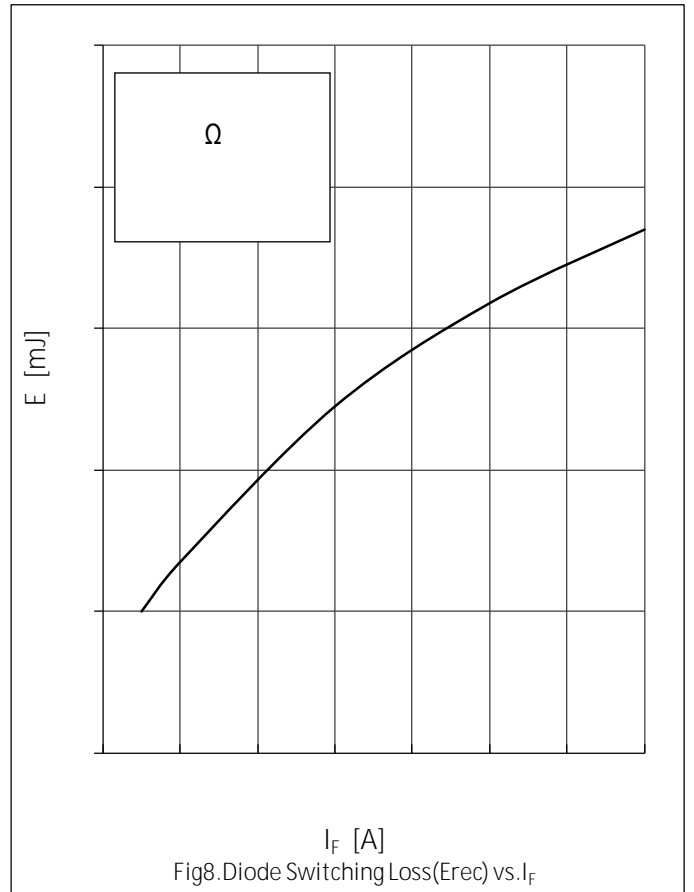
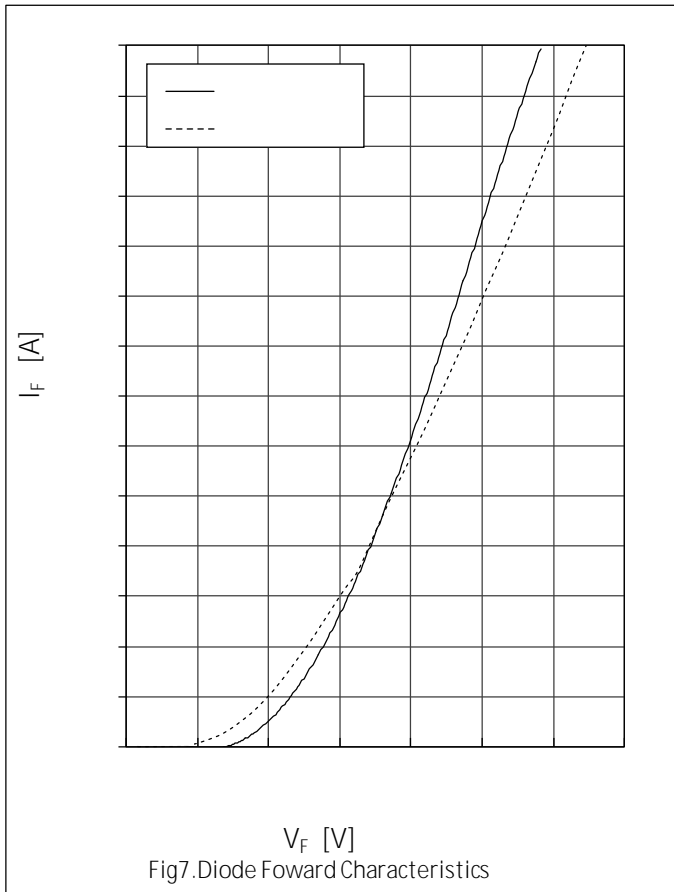
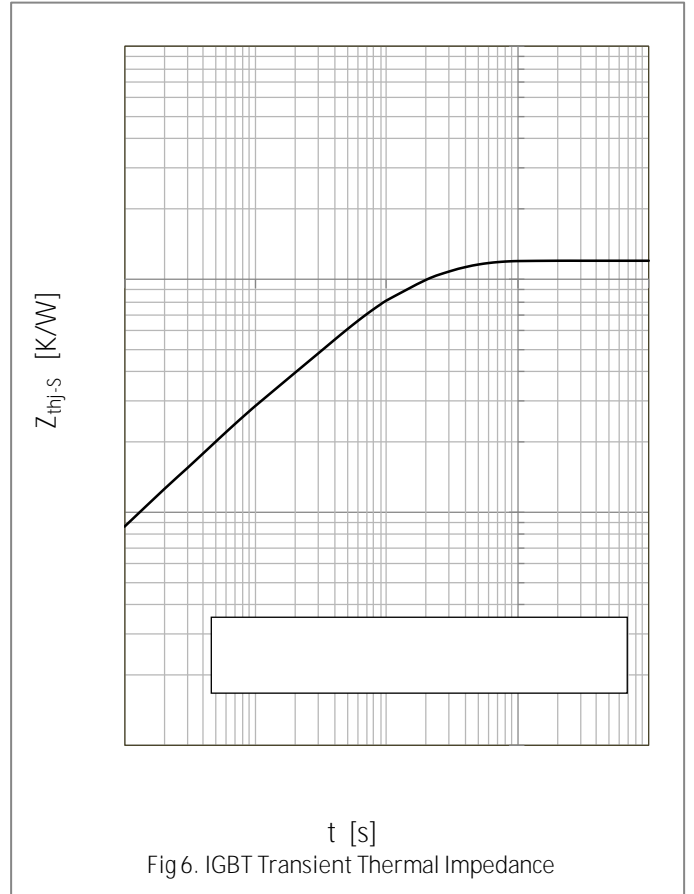
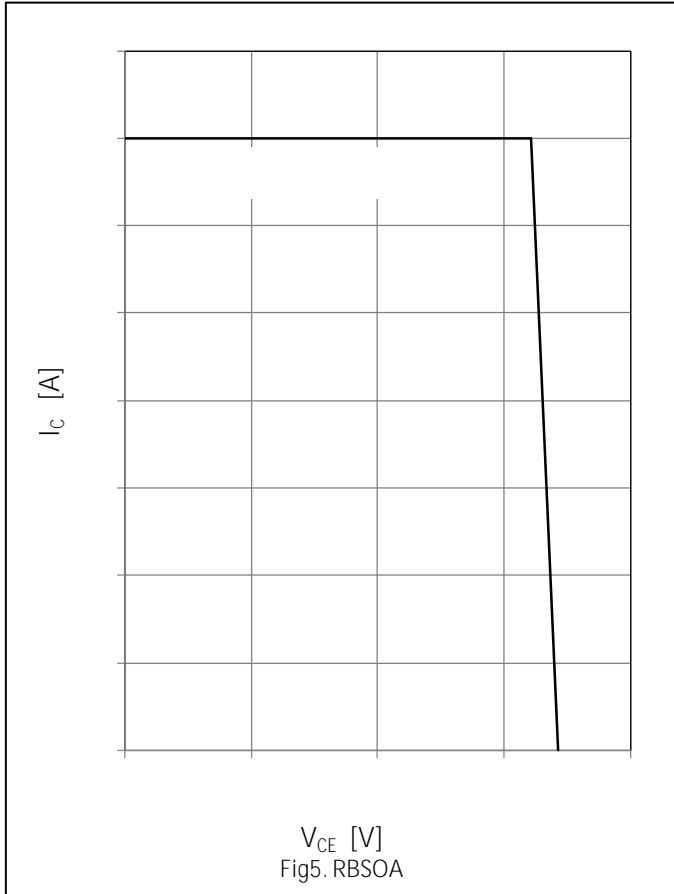
Forward Voltage	V_F	$I_F=15\text{ A}, T_{vj}=25$		2.00	2.65	V
		$I_F=15\text{ A}, T_{vj}=125$		2.10		
		$I_F=15\text{ A}, T_{vj}=150$		2.10		
Recovered Charge	Q_{rr}	$I_F=15\text{ A}$		1.20		uC
Peak Reverse Recovery Current	I_{rr}	$V_R=600\text{ V}$ $-di_F/dt=600\text{ A}/\mu\text{s}$		13.0		A
Reverse Recovery Energy	E_{rec}	$T_{vj}=25$		0.37		mJ

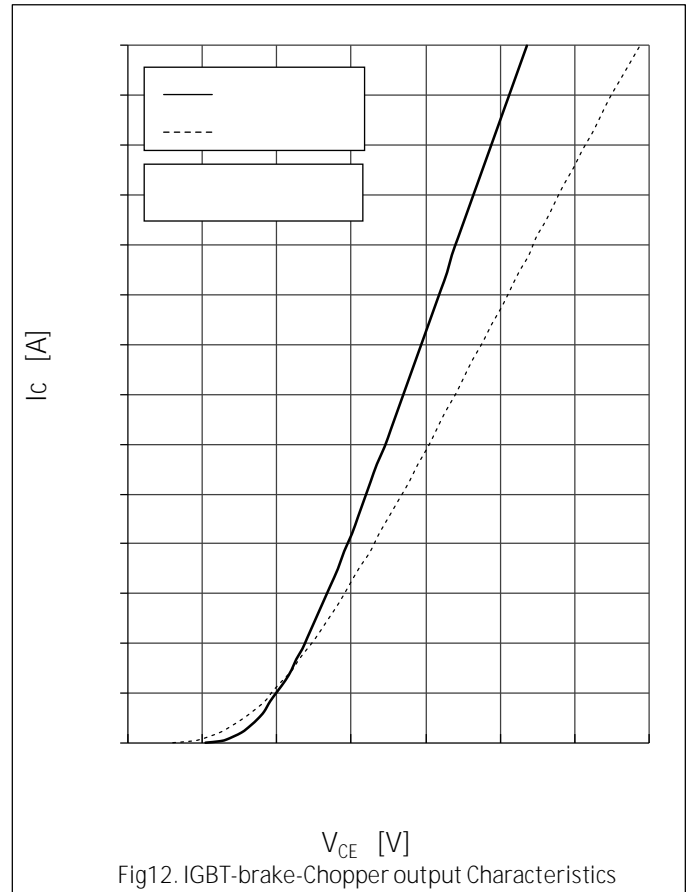
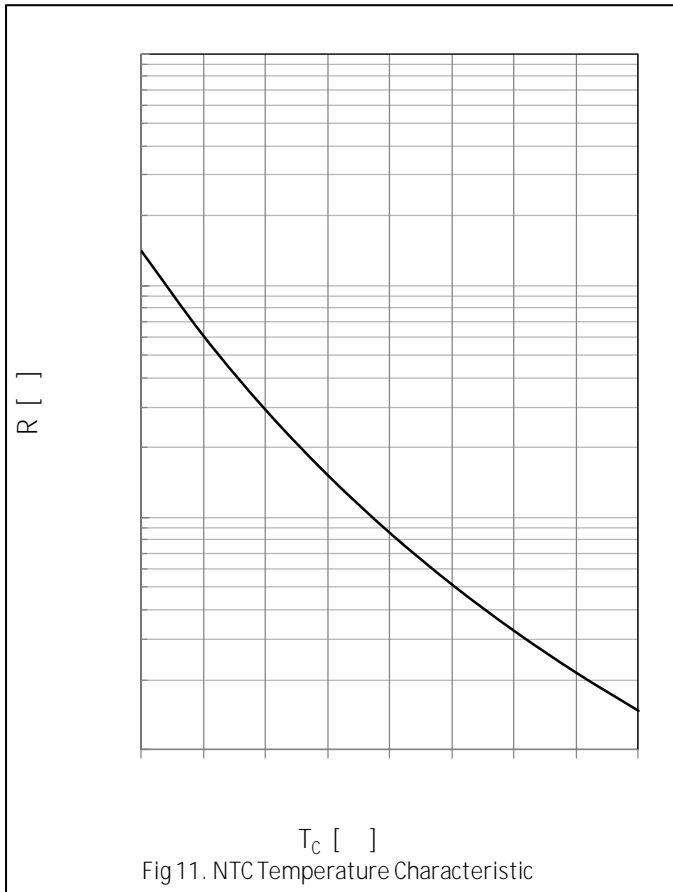
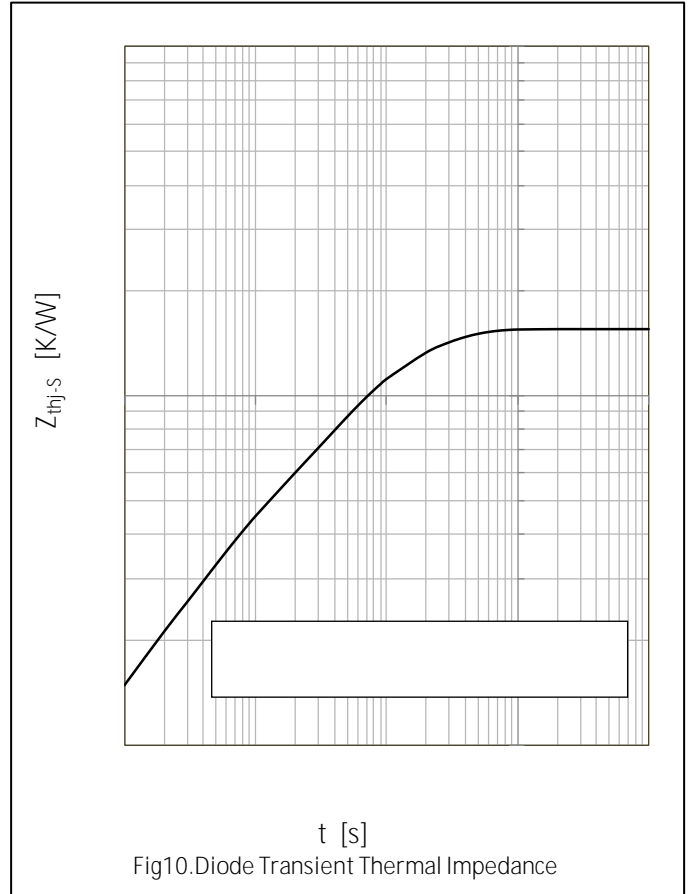
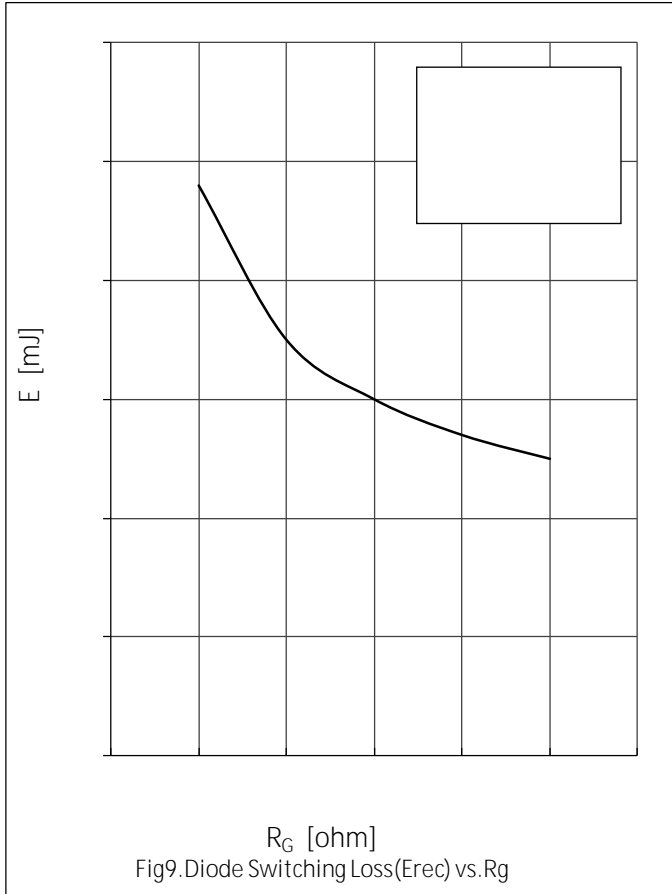
Recovered Charge Q_{rr} $I_F=15\text{ A}$



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Isolation voltage	V_{isol}	$t=1min, f=50Hz$	2500			V
Maximum Junction Temperature	T_{jmax}				175	
Operating Junction Temperature	T_{jop}		-40		150	
Storage Temperature	T_{stg}		-40		125	
Stray-inductance-module	L_{SCE}			30		
Module lead resistance, terminals-chip	$R_{CC'+EE}$	$T_C=25$, per switch		5.00		Ω
	$R_{AA'+CC'}$			6.00		
Thermal Resistance Junction-to Case	$R_{\theta JC}$	per IGBT-inverter		0.60	0.70	K/W
		per Diode-inverter		0.80	0.90	
		per IGBT-brake-chopper		0.60	0.70	
		per Diode-chopper		1.30	1.45	
		per Diode-rectifier		0.90	1.25	
Thermal Resistance Case-to Sink	$R_{\theta CS}$	per IGBT-inverter		0.60		K/W
		per Diode-inverter		0.75		
		per IGBT-brake-chopper		0.60		
		per Diode-chopper		1.05		
		per Diode-rectifier		0.95		
		per Module		0.037		
Mounting Force Per Clamp	F		30		80	N
Weight of Module	G			45		g



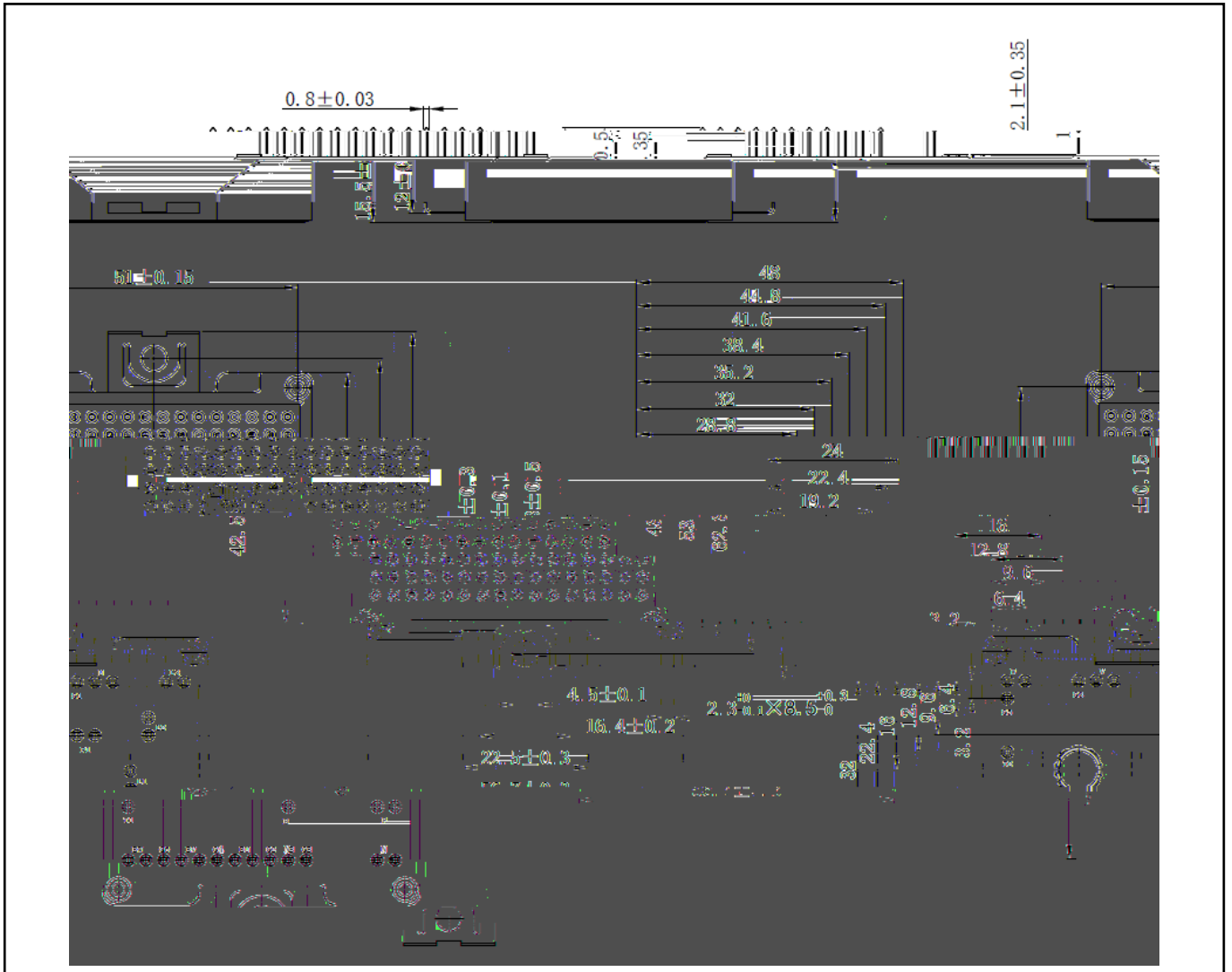
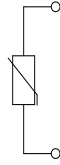




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