Characteristic values

Parameter	Symbol	Conditions	Value			Unit
			Min.	Typ.	Max.	
Gate-emitter Threshold Voltage	$V_{GE(th)}$	$V_{GE}=V_{CE}$, I_C =3mA,T_{vj}=25	5.0	6.2	7.0	V
Collector-Emitter Cut-off Current	I_{CES}	V_{CE}=1200V,V_{GE}=0V,T_{vj}=25			1.0	mA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	Ic=50A,V_{GE}=15V, T_{vj}=25		1.85		V
		Ic=50A,V_{GE}=15V, T_{vj}=125		2.05		
Input Capacitance	C_{ies}	V_{CE}=25V,V_{GE} =0V, f=1MHz,T_{vj}=25		4.29=30780044		TSTFgs0.750 w
Reverse Transfer Capacitance	C_{0} g0 G[C)]TJETQEM /MCID 183/Lang(en-US)BDCqBT/F9 6.96 Tf/GS7 gs0.750 w1 j1 0 0 BDCqBT/F9 10.56 Tf/GS7 gs0.750 wqBT/F9 6.96 Tf-0.					

Diode

Absolute Maximum Ratings

Parameter	Symbol	Conditions	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	T_{vj}=25	1200	V
Continuous DC Forward Current	I_F		50	A
Repetitive Peak Forward Current	I_{FRM}	t_p=1ms	100	A

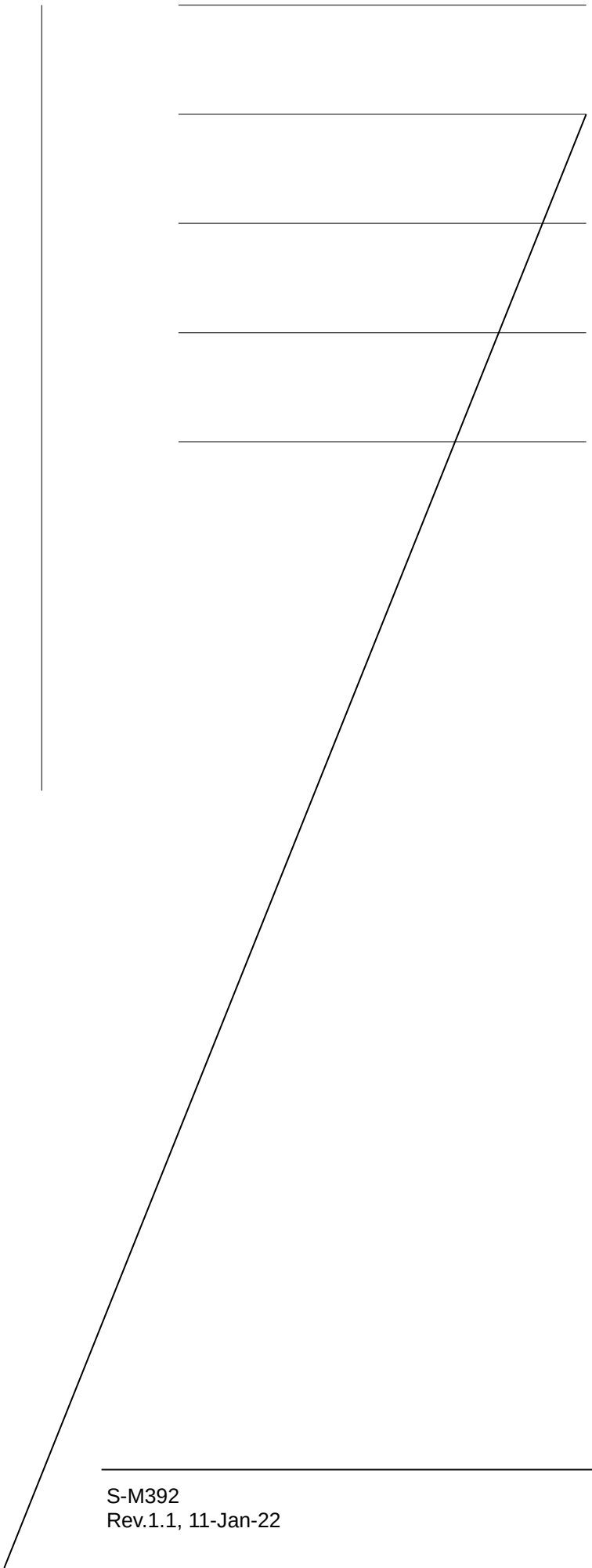
Characteristic values

Parameter	Symbol	Conditions	Value			Unit
			Min.	Typ.	Max.	
Forward Voltage	V_F	I_F=50A,T_{vj}=25		1.95	2.20	V
		I_F=50A,T_{vj}=125		2.05		
Recovered Charge	Q_{rr}	I_F =50 A V_R=600V -di_F/dt =800A/us T_{vj}=25		2.77		uC
Peak Reverse R						

Module Characteristics

T_C=25°C unless otherwise specified

Parameter	Symbol



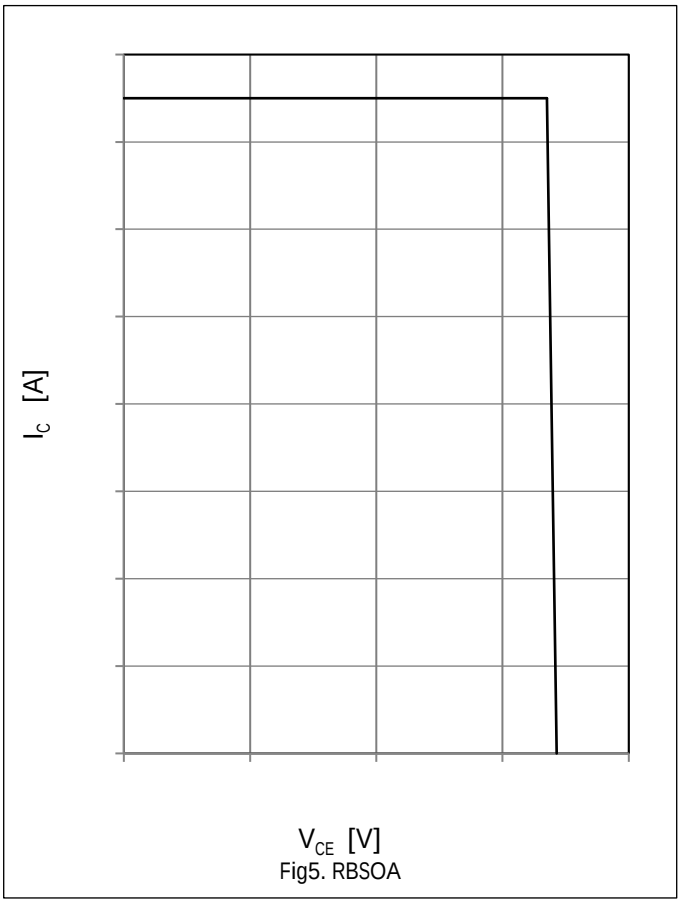


Fig5. RBSOA

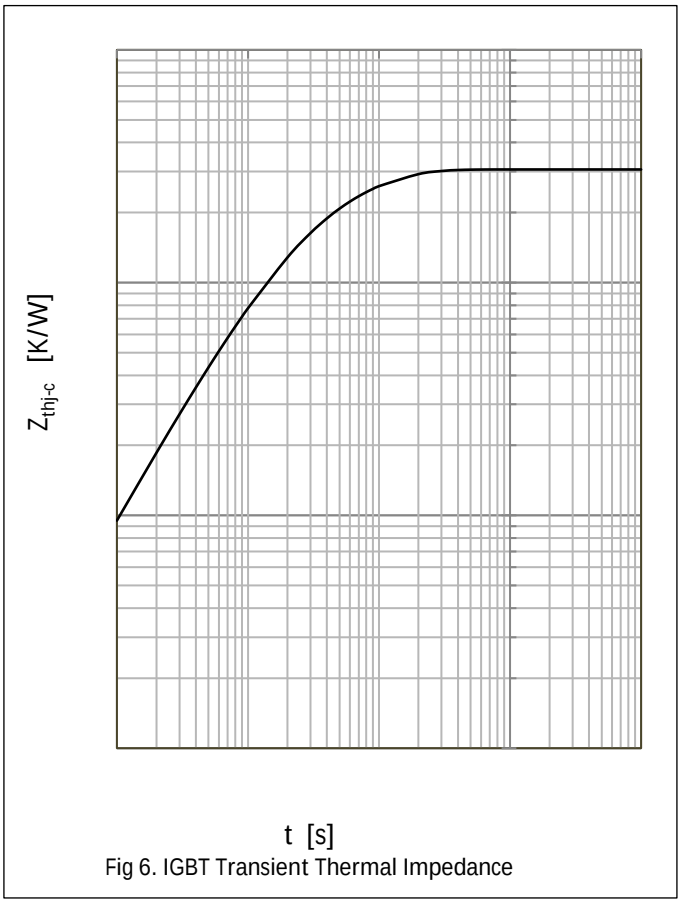
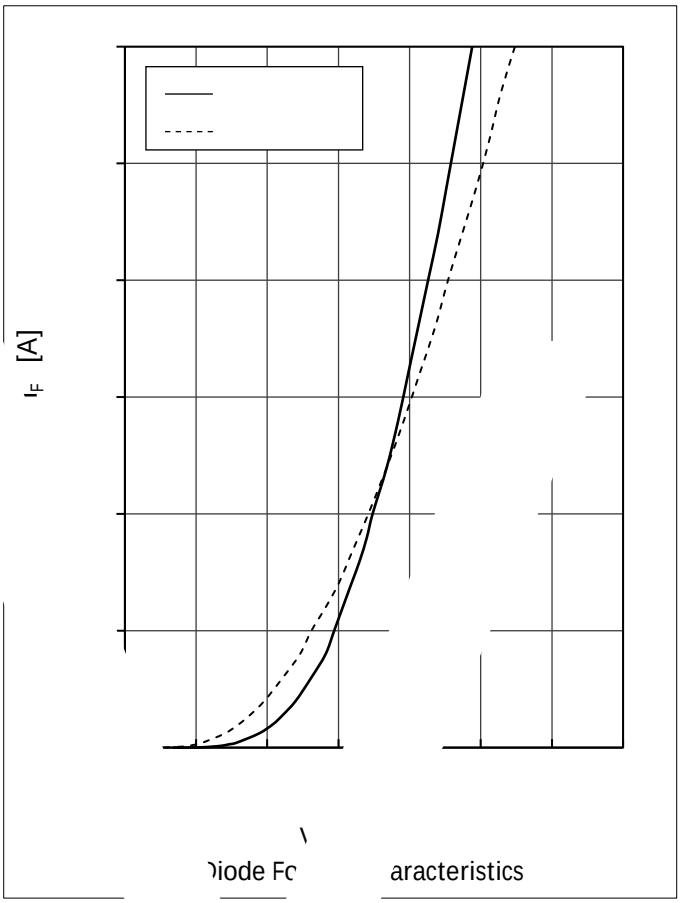


Fig 6. IGBT Transient Thermal Impedance



Diode Characteristics

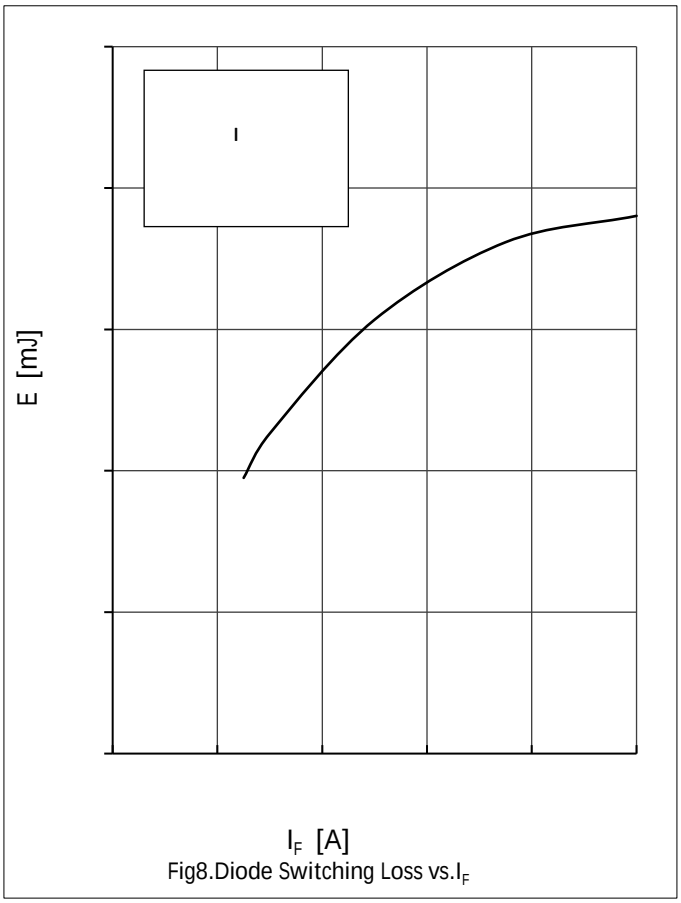


Fig8.Diode Switching Loss vs.I_F

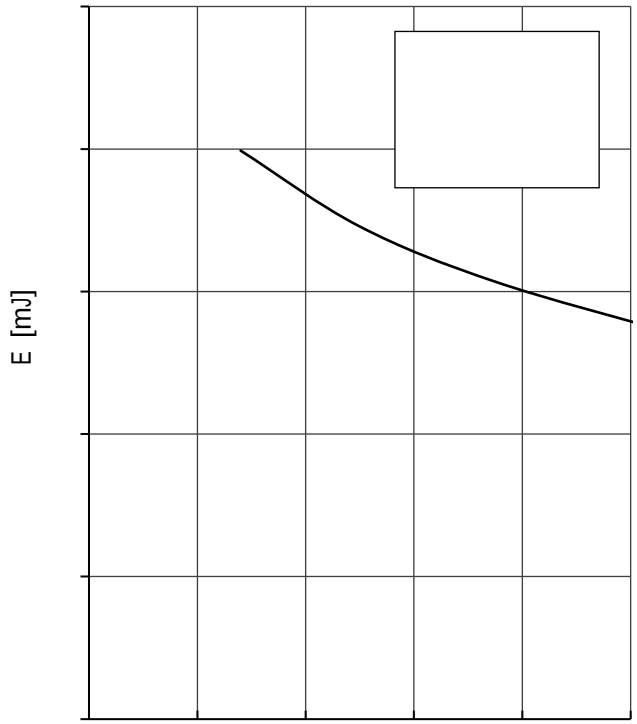


Fig9.Diode Switching Loss vs.Rg

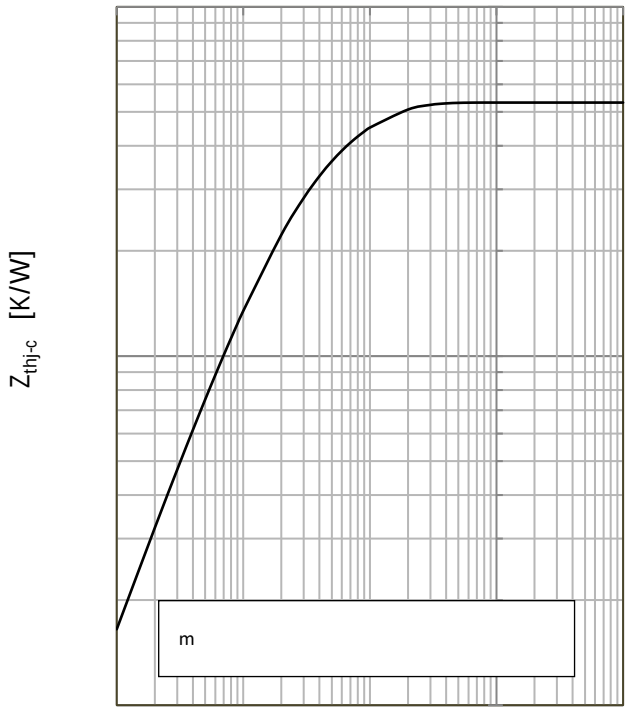
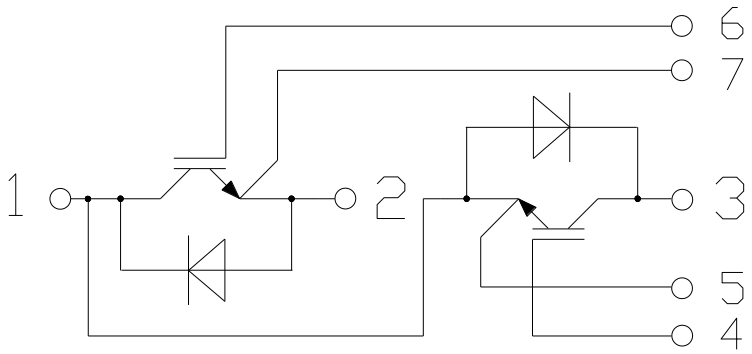


Fig10.Diode Transient Thermal Impedance

- **Circuit Diagram**



- **Package Outline Information**

Dimensions in Millimeters