



MG50HF12TLC1

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	$V_{CE(sat)}$	$I_C=50A, V_{GE}=15V, T_{vj}=25$		1.85		V
		$I_C=50A, V_{GE}=15V, T_{vj}=125$		2.05		
Input Capacitance	C_{ies}	$V_{CE}=25V, V_{GE}=0V,$ $f=1MHz, T_{vj}=25$		4.29	30780044	TS7Fgs0.750 w

Reverse Transfer Capacitance

$C_{0\ g0\ G(C)JTJETOEM \&ICID\ 183/Lang(en-US)\ BDCqBT/F9\ 6.96\ Tf/GS7\ gs0.750\ w1\ j1\ 0\ 0\ BDCqBT/F9\ 10.56\ Tf/GS7\ gs0.750\ wqBT/F9\ 6.96\ Tf-0.$



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● 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}	$t_p=1\text{ms}$	100	A

Characteristic values

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



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● Module Characteristics

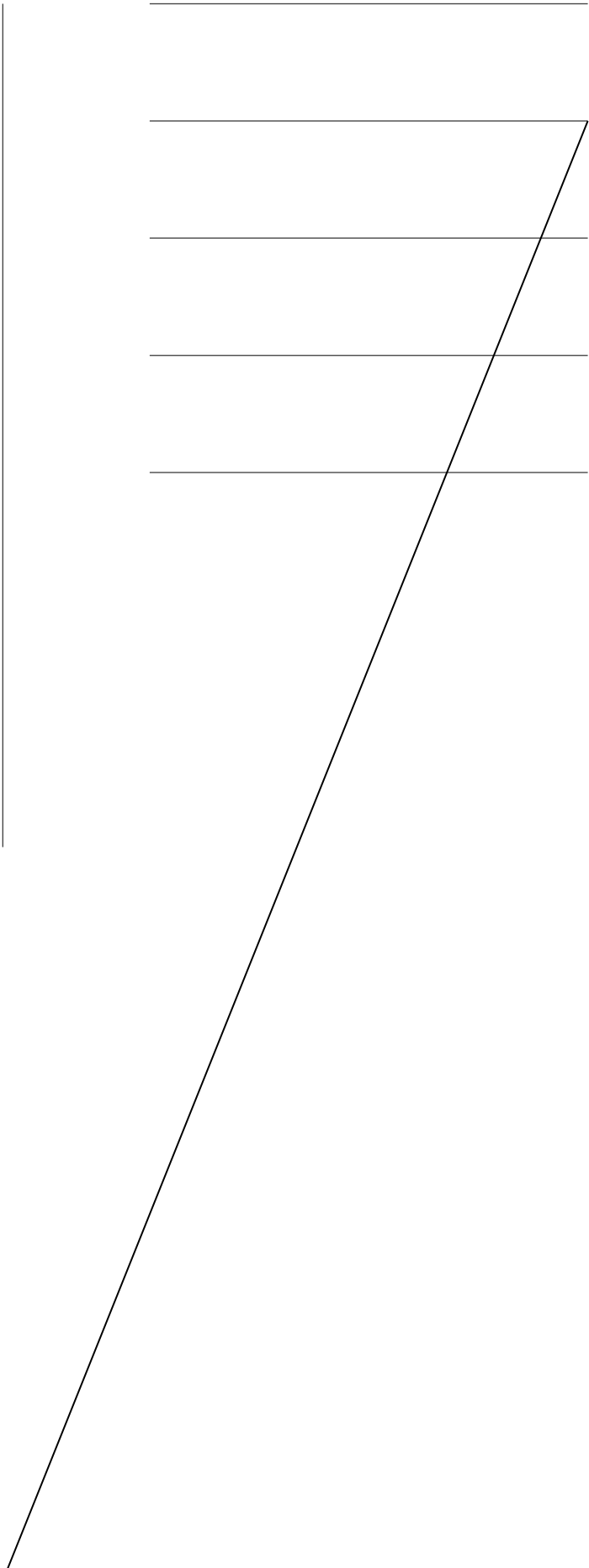
T_C=25°C unless otherwise specified

Parameter

Symbol

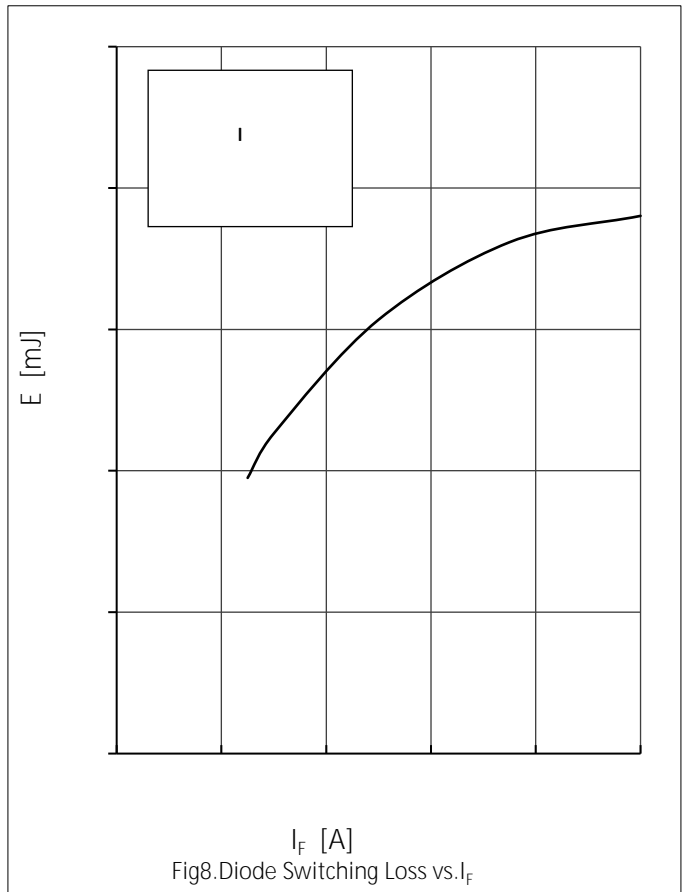
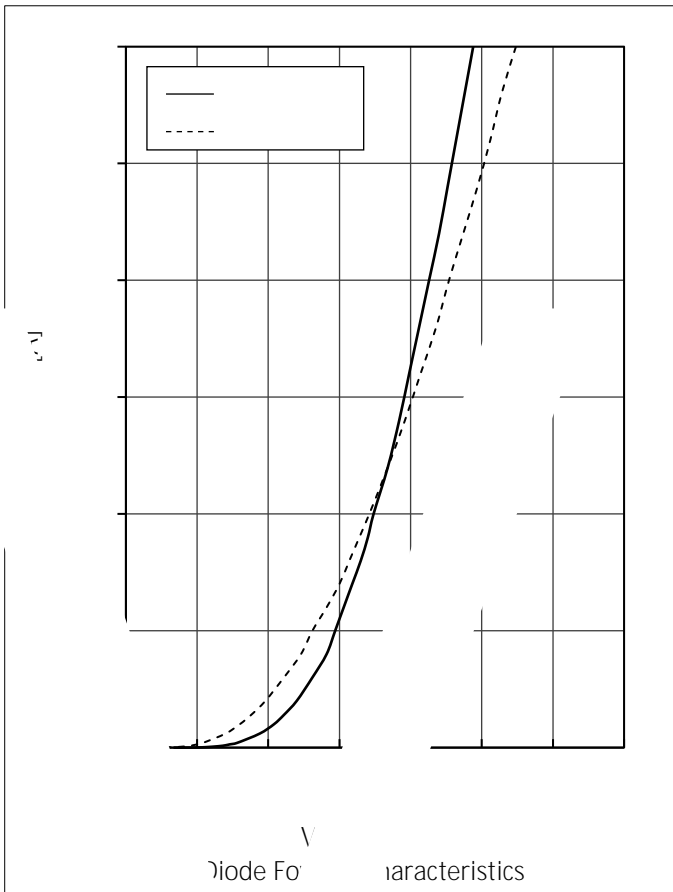
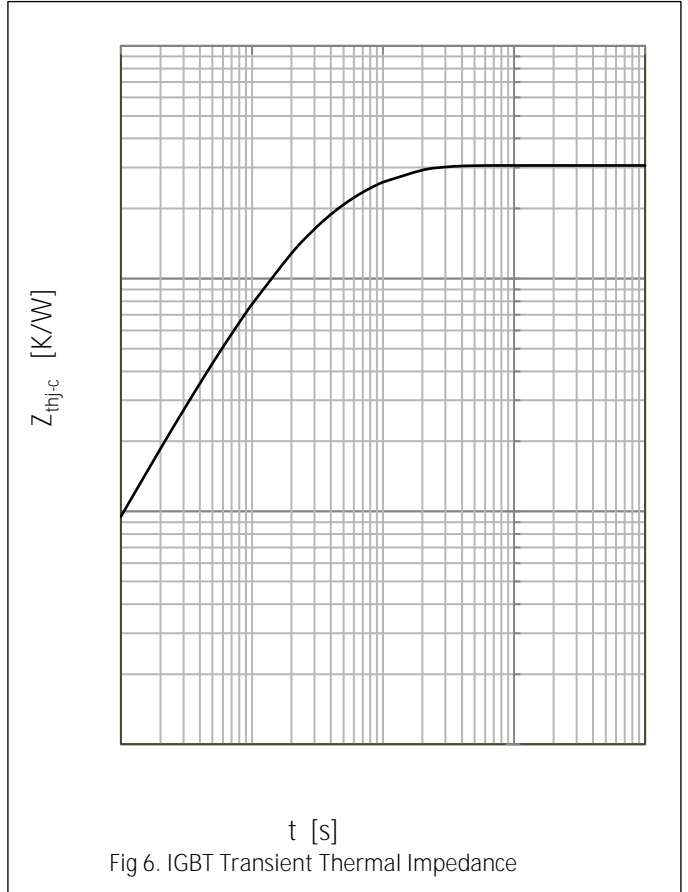
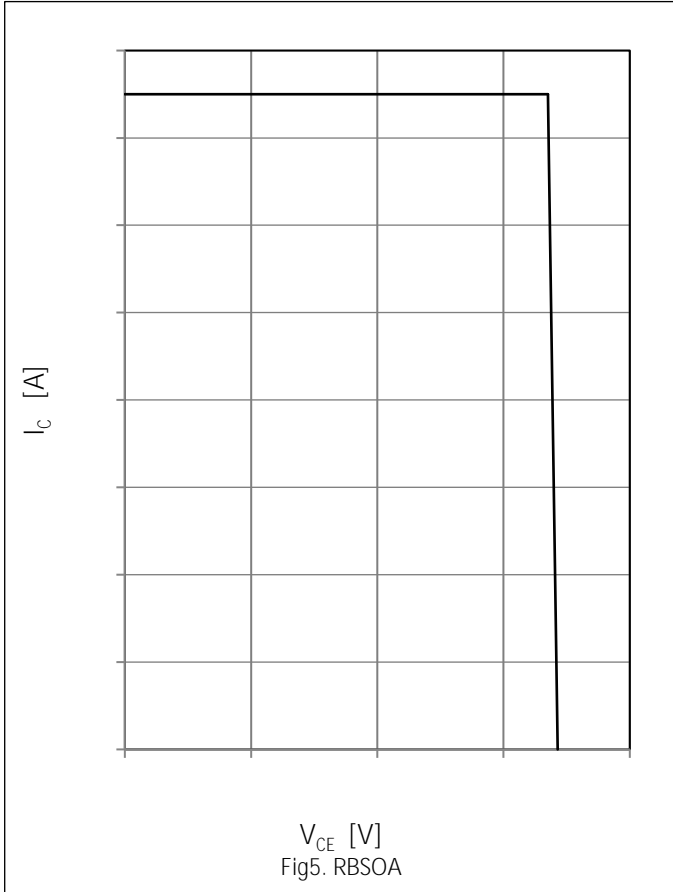


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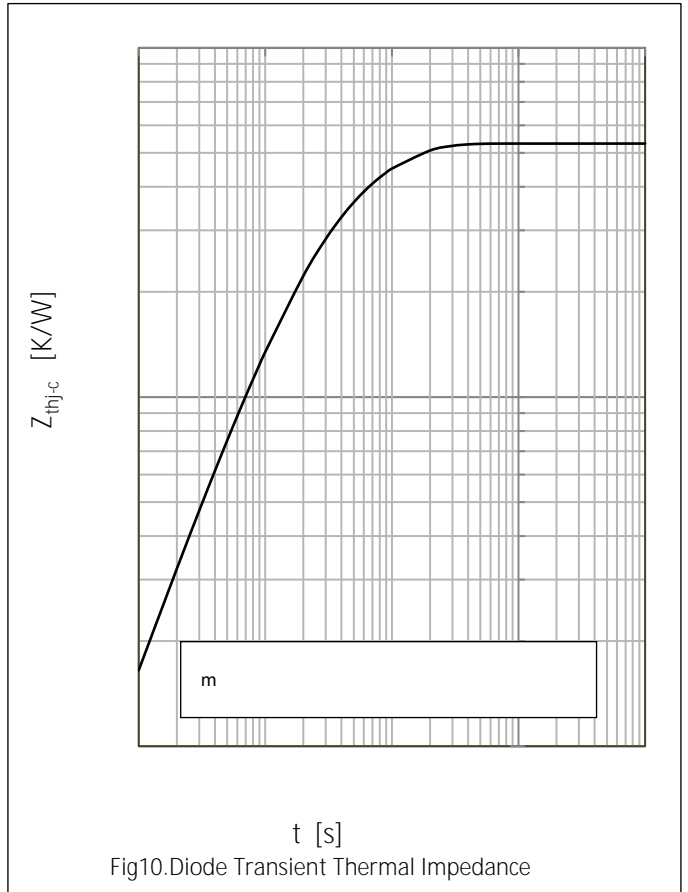
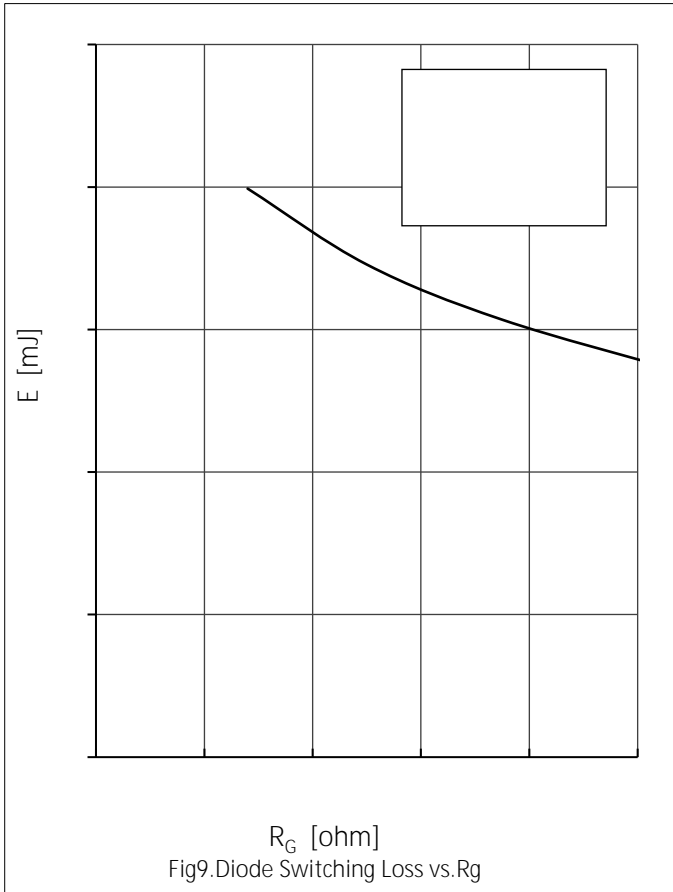


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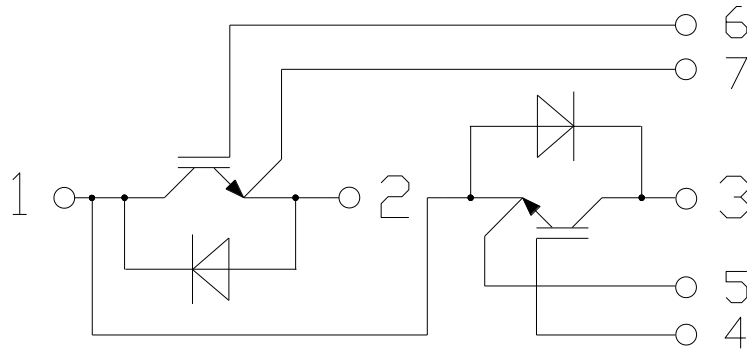
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● Circuit Diagram



● Package Outline Information

Dimensions in Millimeters

