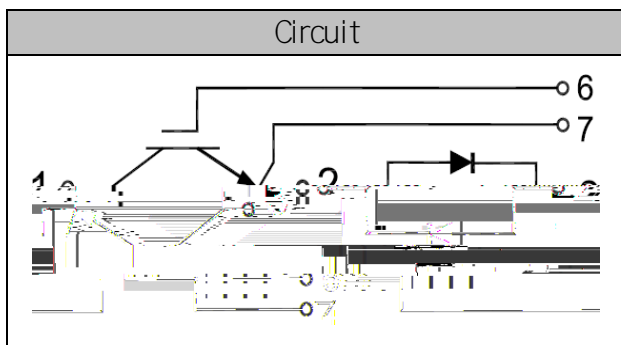


1200V  
150A

Inverter for motor drive  
AC and DC servo drive amplifier  
UPS (Uninterruptible Power Supplies)  
Soft switching welding machine



Low  $V_{CE(sat)}$  with Trench technology  
 $V_{ce(sat)}$  with positive temperature coefficient  
High short circuit capability(10 $\mu$ s)  
Including ultra fast & soft recovery anti-parallel FWD  
Low inductance  
Maximum junction temperature 175

Collector-Emitter Voltage	$V_{CES}$	$V_{GE}=0V, I_C =1mA, T_{vj}=25$	1200	V
Continuous Collector Current	$I_C$	$T_C=100$	150	A
Repetitive Peak Collector Current	$I_{CRM}$	$t_p=1ms$	300	A
Gate-Emitter Voltage	$V_{GES}$	$T_{vj}=25$	20	V
Total Power Dissipation	$P_{tot}$	$T_C=25$ $T_{vjmax}=175$	833	W



Gate-Emitter Threshold Voltage	$V_{GE(th)}$	$V_{GE}=V_{CE}, I_C=4mA, T_{vj}=25$	5.2	5.9	6.4	V
Collector-Emitter Cut-off Current	$I_{CES}$	$V_{CE}=1200V, V_{GE}=0V, T_{vj}=25$			1.0	mA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=150A, V_{GE}=15V, T_{vj}=25$		1.90	2.30	V
		$I_C=150A, V_{GE}=15V, T_{vj}=125$		2.05		
		$I_C=150A, V_{GE}=15V, T_{vj}=150$		2.20		
Gate Charge	$Q_G$			1.56		uC
Input Capacitance	$C_{ies}$	$V_{CE}=25V, V_{GE}=0V,$ $f=1MHz, T_{vj}=25$		11.0		nF
Reverse Transfer Capacitance	$C_{res}$			0.5		nF
Gate-Emitter leakage current	$I_{GES}$	$V_{CE}=0V, V_{GE}=20V, T_{vj}=25$			400	nA
Turn-on Delay Time	$t_{d(on)}$	$I_C=150A$ $V_{CE}=600V$ $V_{GE}=\pm 15V$ $R_G=4.7$ $T_{vj}=25$		196		ns
Rise Time	$t_r$				57	
Turn-off Delay Time	$t$					



Repetitive Peak Reverse Voltage	$V_{RRM}$	$T_{vj}=25$	1200	V
Continuous DC Forward Current	$I_F$		150	A
Repetitive Peak Forward Current	$I_{FRM}$	$t_p=1ms$	300	A


$I_F=150A, T_{vj}=25$

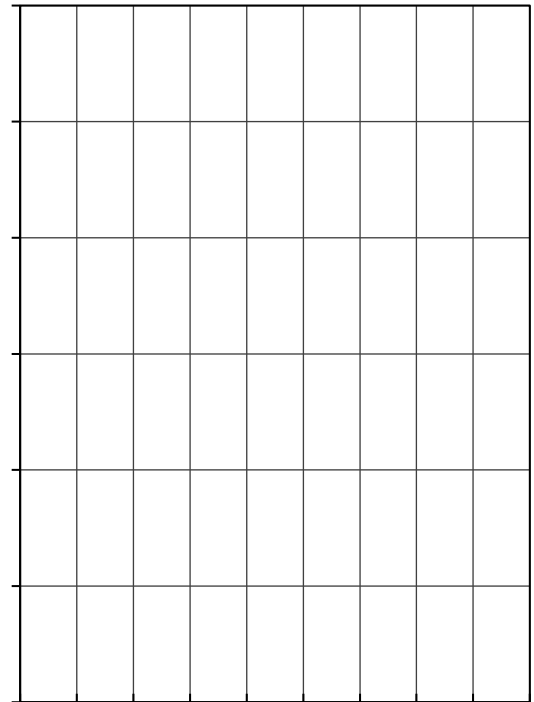
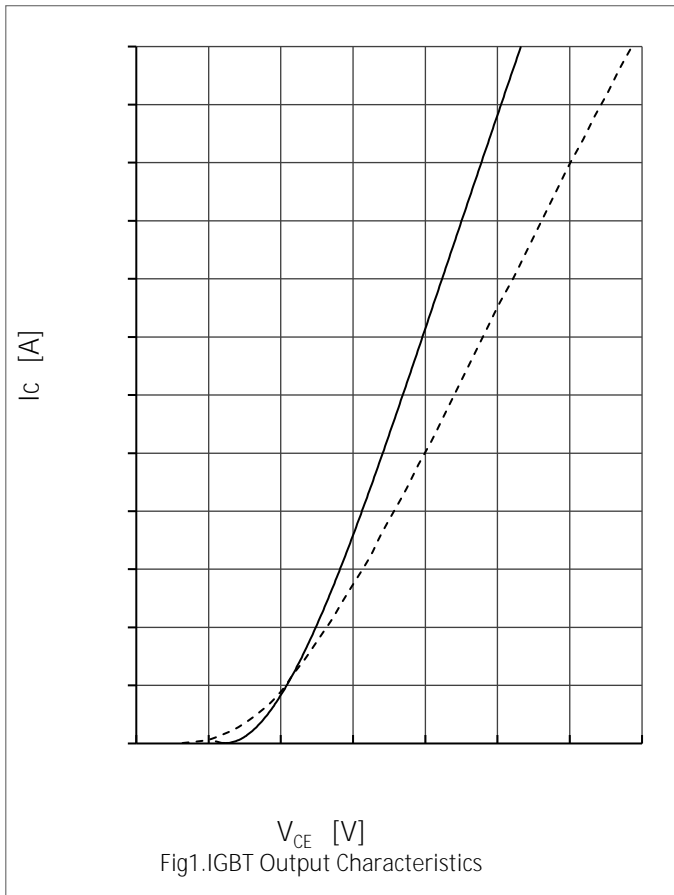
1.941 E

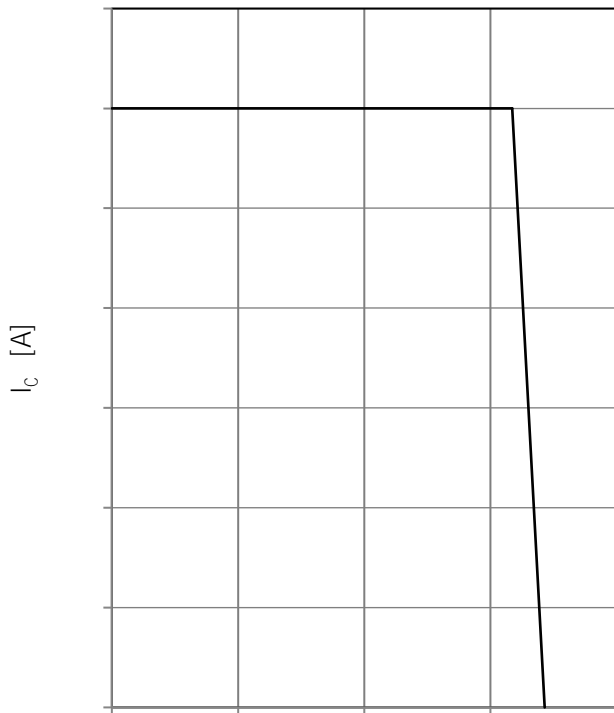
Forward Voltage

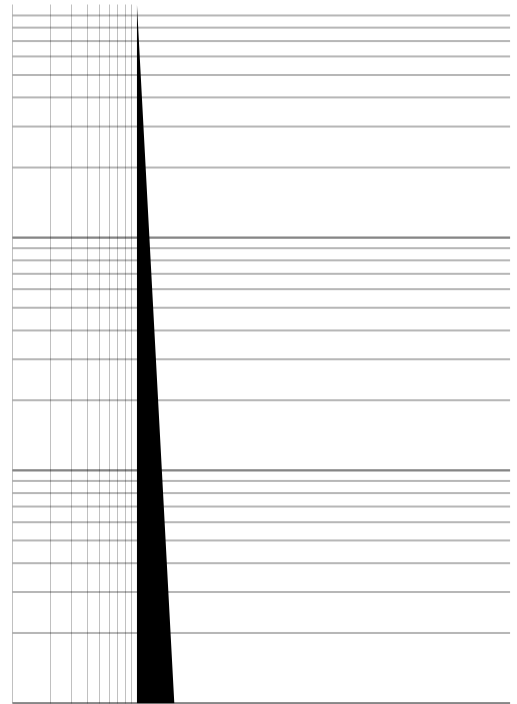
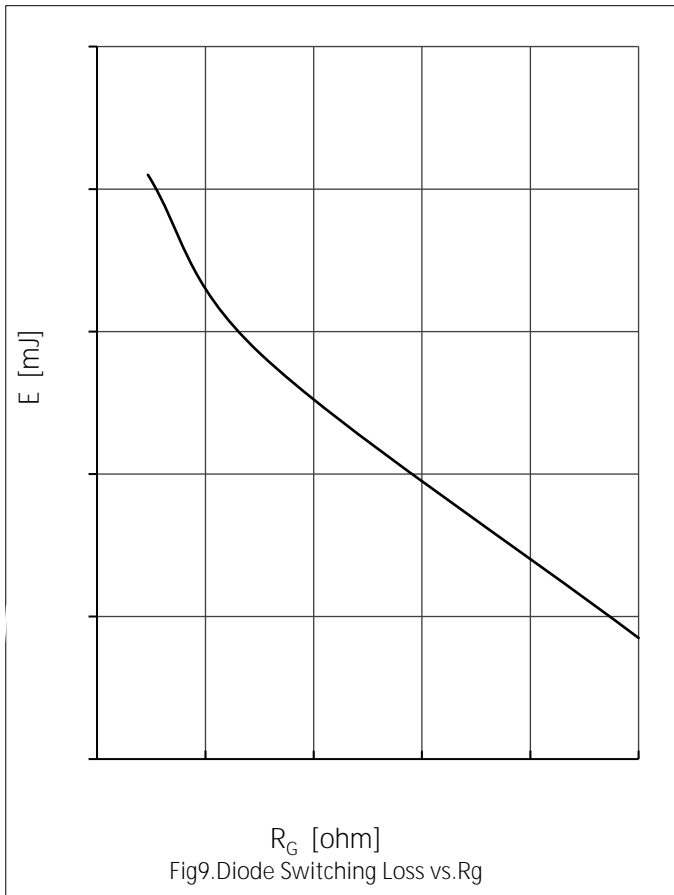
$V_F$

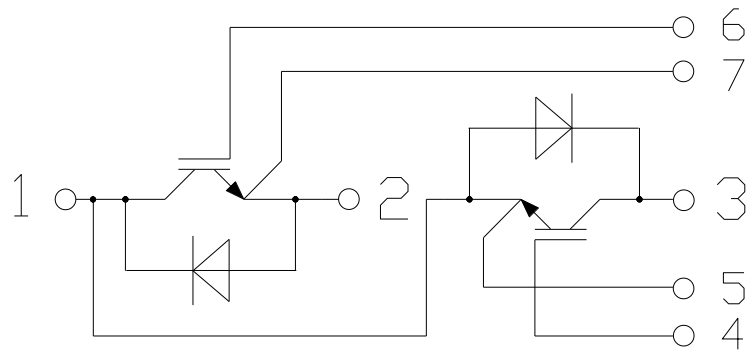


Isolation voltage	$V_{isol}$	$t=1min, f=50Hz$	2500			V
Maximum Junction Temperature	$T_{jmax}$				175	
Operating Junction Temperature	$T_{vjop}$		-40		150	
Storage Temperature	$T_{stg}$		-40		125	
Thermal Resistance Junction to Case	$R_{jc}$	per IGBT			0.18	K/W
		per Diode			0.31	
Thermal Resistance Case to Sink	$R_{cs}$	Conductive grease applied		0.012	0.035	K/W
Module Electrodes Torque	$M_t$	Recommended(M6)	3.0		5.0	N·m
Module to Sink Torque	$M_s$	Recommended(M6)	3.0		5.0	N·m
Weight of Module	G			315		g









### Package Outline Information

