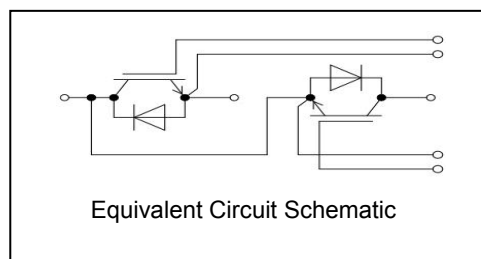


IGBT MODULE 2-PACK TYPE**Features**

- $I_c=150A$
- Ultrafast switching speed
- Excellent short circuit ruggedness
- Low conduction loss

**Typical Applications**

- IGBTs offer ultrafast switching speed for application such as Welding, inductive heating, UPS and other high frequency Application.

Absolute Maximum Ratings

V_{CES}	Collector to Emitter Voltage		1200	V
V_{GES}	Continuous Gate to Emiiter Voltage		+/-30	V
I_C	Continuous Collector Current	$T_C=25^{\circ}C$	300	A
		$T_C=100^{\circ}C$	150	
I_{CM}	Pulse Collector Current	$T_J=150^{\circ}C$	300	A
P_D	Maximum Power Dissipation(IGBT)	$T_C=25^{\circ}C$	740	W
t_{sc}	Short Circuit Withstand Time		> 10	μs
T_J	Maximum IGBT Junction Temperature		-40~+150	$^{\circ}C$
T_{JOP}	Maximum Operating Junction temperature Rang		-40~+150	$^{\circ}C$
T_{stg}	Storage Temperature Range		-40~+125	$^{\circ}C$

Electrical Characteristics at T_J=25°C (Unless Otherwisen Specified)

Parameter		Test Condition	Min.	Typ.	Max.	Unit
BV _{CES}	Collector to Emitter Breakdown Voltage	V _{GE} =0V, I _C =1mA	1200			V
I _{CES}	Collector to Emitter Leakage Current	V _{GE} =0V, V _{CE} = V _{CES}			5	mA
I _{GES}	Gate to Emitter Leakage Current	V _{GE} =+/-30V, V _{CE} =0V			400	nA
V _{GE(th)}	Gate Threshold Voltage	I _C =1mA, V _{CE} =V _{GE}	5.0		6.0	V
V _{CE(sat)}	Collector to Emitter Saturation Voltage (Module Level)	I _C =300A T _J =25°C V _{GE} =15V		3.0	3.2	V

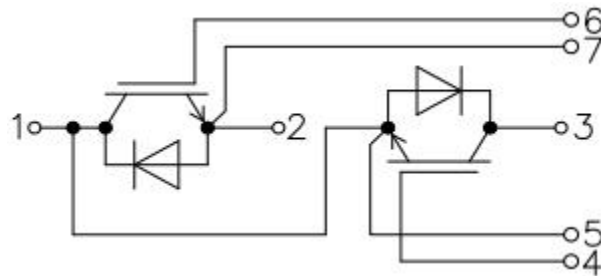
Switching Characteristics

td(on)	Turn-on Delay Time	VCC=600V Ic=300A RG=10Ω VGE=+/-15V Inductive Load	TJ=25℃		40		ns
			TJ=125℃		45		
tr	Turn-on Rise Time		TJ=25℃		65		ns
			TJ=125℃		70		
td(off)	Turn-off Delay Time		TJ=25℃		500		ns
			TJ=125℃		535		
tf	Turn-off Fall Time		TJ=25℃		100		ns
			TJ=125℃		130		
Eon	Turn-on Switching Loss		TJ=25℃		6.0		mJ
			TJ=125℃		7.4		
Eoff	Turn-off Switching Loss	TJ=25℃		3.4		mJ	
		TJ=125℃		8.0			
Qg	Total Gate Charge		TJ=25℃		1300		nC
Rgint	Integrated Gate Resistor	f=1M,Vpp=1V	TJ=25℃		1.3		Ω
Cies	Input Capacitance	VCE=25V VGE=0V f=1MHZ	TJ=25℃		13000		pF
Coes	Output Capacitance		TJ=25℃		1800		
Cres	Reverse Transfer capacitance		TJ=25℃		1050		
Rjc	Thermal Resistance,Junction-to-Case					0.169	℃/W

Module Characteristics

Parameter		Min.	Typ.	Max.	Unit
V _{iso}	Isolation Voltage(All terminals Shorted) f=50Hz, 1Minute	2500		3000	V
R _{cs}	Case-to-Sink(Conductive Grease Applied)		0.1		°C/W
M	Power Terminals Screw M6	4.0		6.0	Nm
M	Mounting Screw M6	4.0		6.0	Nm
G	Weight		300		g

Internal Circuit:



Package Dimension in Millimeter

