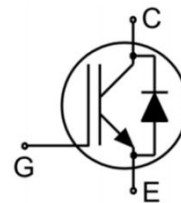


V_{CES}	1250V
I_C	50A
$V_{CE(sat)}$	1.9V



Trench FS technology offering
 High speed switching
 Low gate charge and $V_{CE(sat)}$
 High ruggedness, temperature stable behavior
 Maximum junction temperature 175°C



Solar Inverters
 Uninterruptible power supplies
 Motor drives
 Air condition

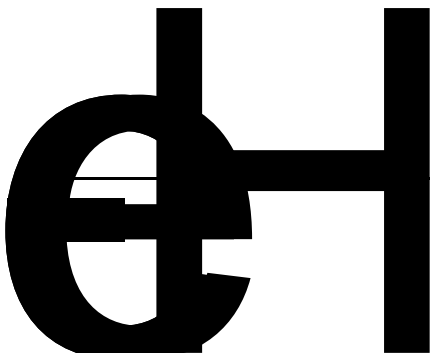
V_{CES}	Collector-Emitter Voltage	1250	V
V_{GES}	Gate- Emitter Voltage	30	V
I_C	Collector Current	100	A
	Collector Current @ $T_C = 100\text{ }^\circ\text{C}$	50	
I_{Cpuls}	Pulsed Collector Current t_p limited by T_{jmax}	200	
-	Turn off safe operating area $V_{CE}=1200V$ $T_J=175^\circ\text{C}$	200	
I_F	Diode Continuous Forward Current @ $T_C = 100\text{ }^\circ\text{C}$	50	
I_{FM}	Diode Maximum Forward Current	200	
P_D	Power Dissipation @ $T_C = 25^\circ\text{C}$	468	W
	Power Dissipation @ $T_C = 100^\circ\text{C}$	234	W
T_J T_{STG}	Operating Junction and Storage Temperature Range	-55 to +175	$^\circ\text{C}$
T_L	Maximum Temperature for Soldering	260	$^\circ\text{C}$

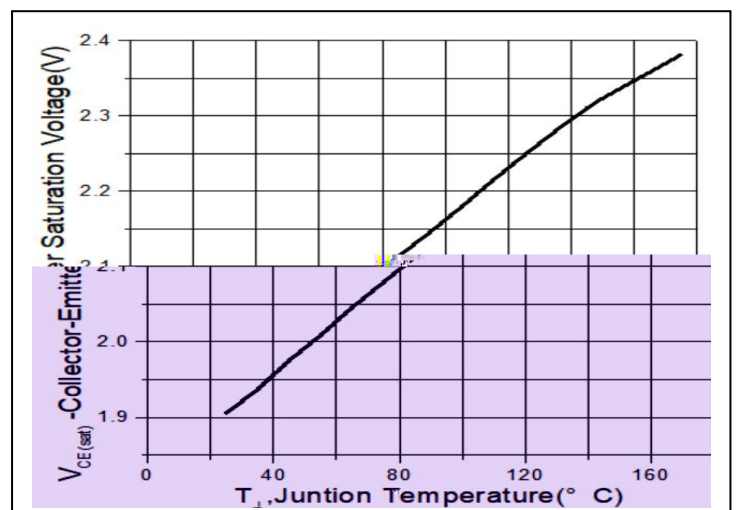
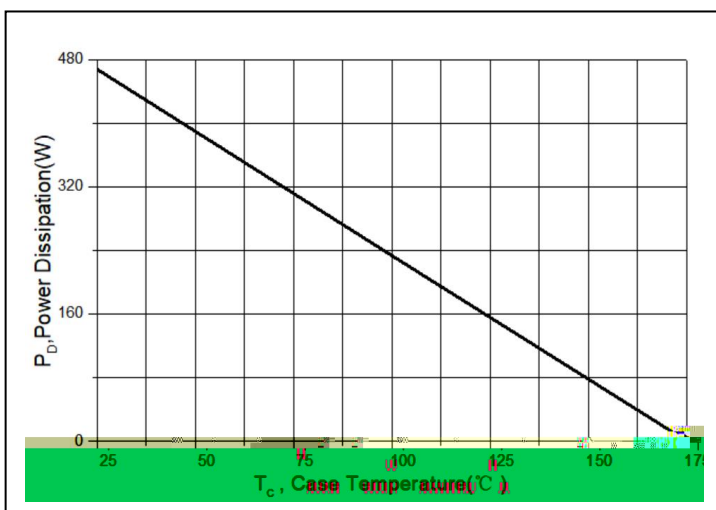
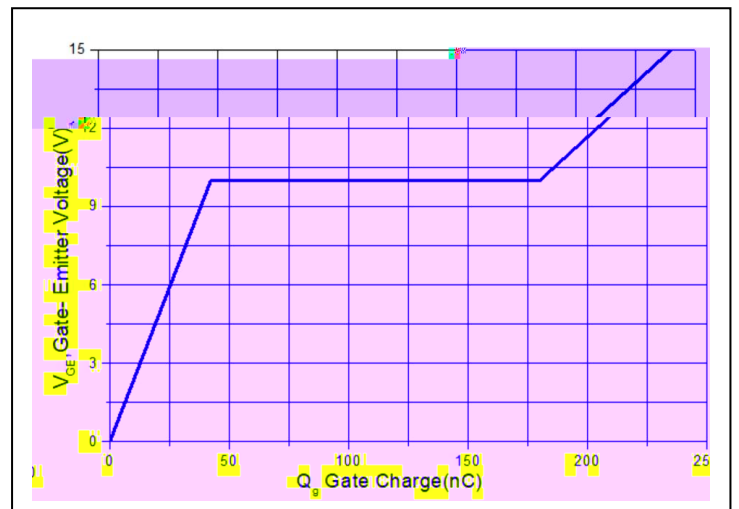
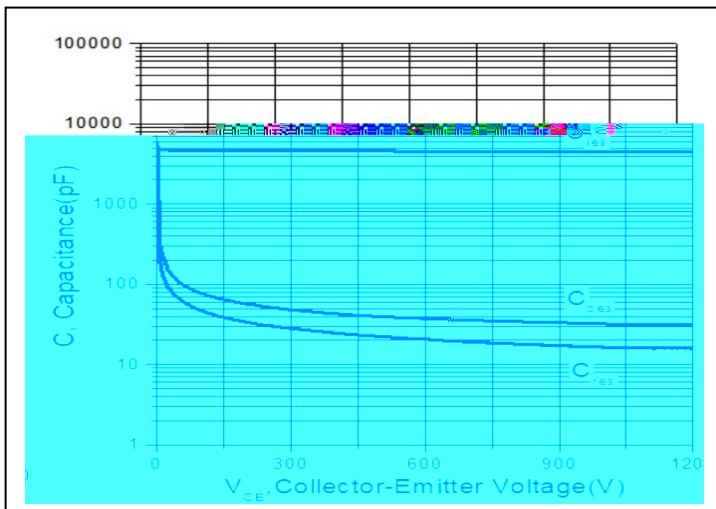
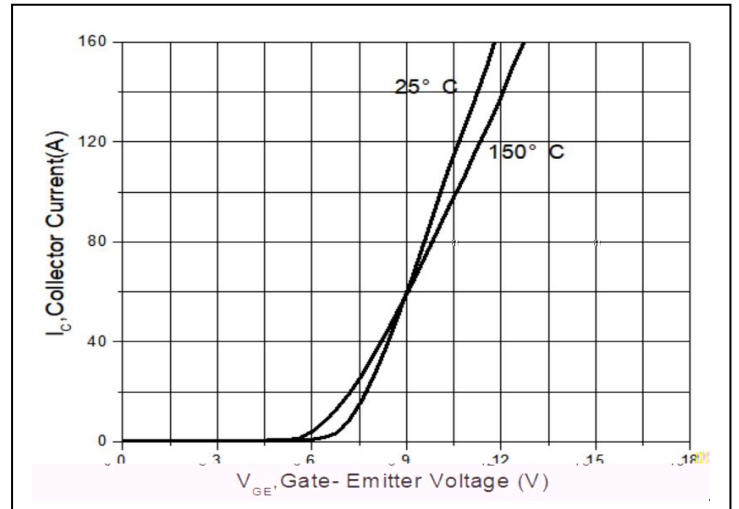
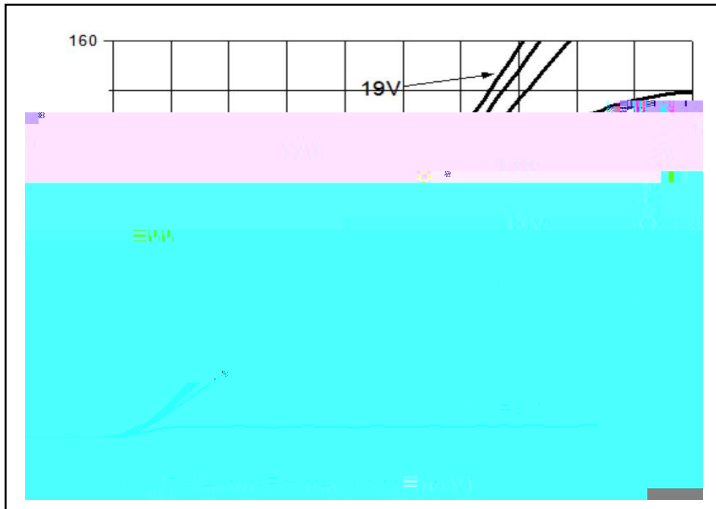
R _{JC}	Thermal Resistance, Junction-to-case for IGBT	—	0.32	°C/W
	Thermal Resistance, Junction-to-case for Diode	—	0.61	°C/W
R _{JA}	Thermal Resistance, Junction-to-ambient	—	40	°C/W

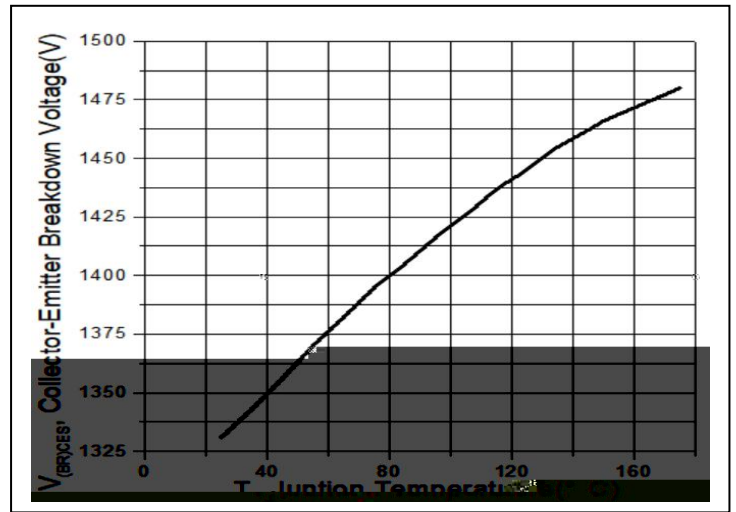
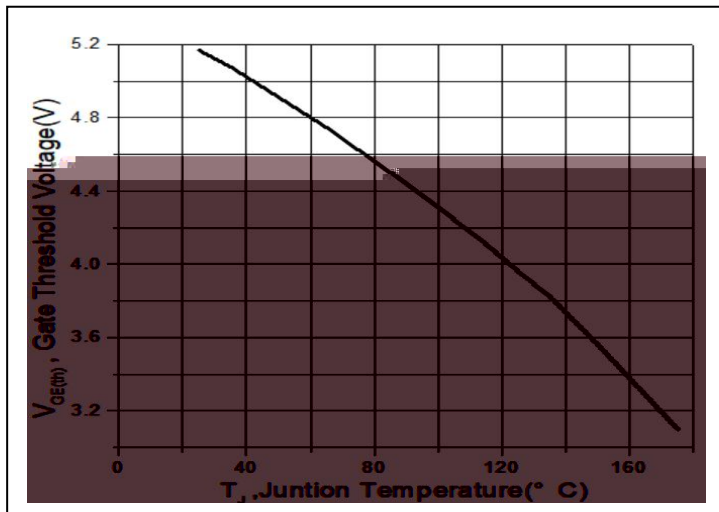
@ T_A=25°C unless otherwise specified

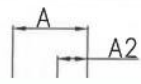
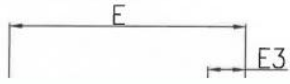
V _{(BR)CES}	Collector-Emitter Breakdown Voltage	1250	—	—	V	V _{GE} =0V, I _{CE} =1mA
V _{CE(sat)}	Collector-Emitter Saturation Voltage	—	1.9	2.1	V	I _C =50A, V _{GE} =15V @ T _J 25°C
		—	2.38	—		
V _{GE(th)}	Gate Threshold Voltage	4.5	—	6	V	I _C =1.7mA, V _{CE} =V _{GE}
I _{CES}	Collector-Emitter Leakage Current	—	—	200	μA	V _{GE} =0V, V _{CE} =1200V
I _{GES}	Gate to					

— 50 CE CE 0









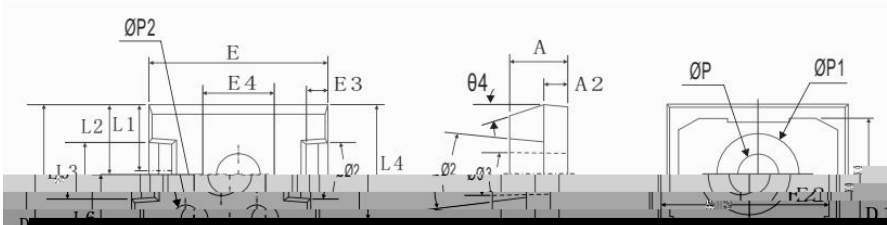
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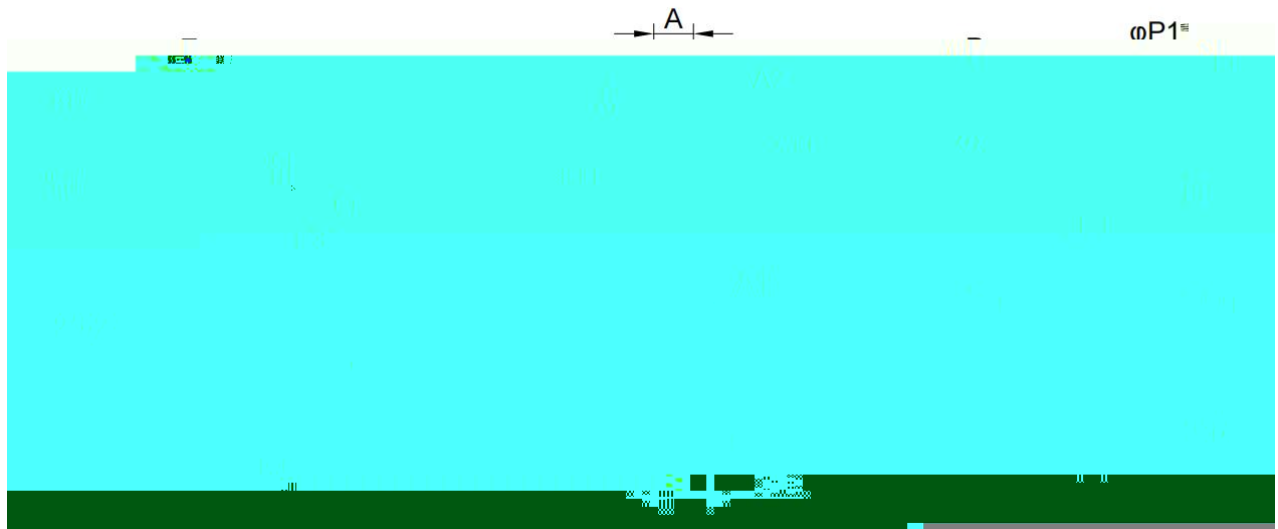
$\varnothing P$

COMMON DIMENSIONS

COMMON DIMENSIONS
(UNITS OF MEASURE=mm)

SYMBOL	MIN	NOM	MAX
A	4.80	5.00	5.20
A1	2.20	2.40	2.60
A2	1.85	2.00	2.15
b	1.10	1.20	1.30
b1	2.80	3.00	3.20
b2	1.80	2.00	2.20
c	0.52	0.62	0.72
D	20.35	20.65	20.95





TO247-3L								
	Min	Typ	Max		Min	Typ	Max	
A	4.7	5.00	5.20	E1	13.2	13.5	13.8	
A1	2.30	2.40	2.50	E2	4.90	5.00	5.10	
A2	1.90	2.00	2.10	E3	1.50	1.60	1.70	
b	1.10	1.20	1.30	e	5.34	5.44	5.54	
b2	1.80	2.00	2.20	L	19.80	20.00	20.30	
b4	2.80	3.00	3.20	L1		4.17	4.50	
C	0.5	0.6	0.7	P	3.50	3.60	3.70	
D	20.8	20.95	21.1	P1	7.00	7.19	7.40	
D1	16.25	16.55	16.85	S	6.00	6.15	6.30	
D2	0.95	1.17	1.35					
E	15.48	15.88	16.28					

