

**INSULATED GATE BIPOLAR TRANSISTOR WITH ULTRAFAST SOFT RECOVERY DIODE**

**Features**

- Low  $V_{CE(on)}$  Trench IGBT Technology
- Low Switching Losses
- 5 $\mu$ s short circuit SOA
- Square RBSOA
- 100% of the parts tested for  $I_{LM}$ ①
- Positive  $V_{CE(on)}$  Temperature Coefficient.
- Ultra Fast Soft Recovery Co-pak Diode
- Tighter Distribution of Parameters
- Lead-Free, RoHS Compliant
- Automotive Qualified \*

**Benefits**

- High Efficiency in a Wide Range of Applications
- Suitable for a Wide Range of Switching Frequencies due to Low  $V_{CE(ON)}$  and Low Switching Losses
- Rugged Transient Performance for Increased Reliability
- Excellent Current Sharing in Parallel Operation
- Low EMI

**Applications**

- Air Conditioning Compressor

n-channel

$V_{CES} = 600V$

$I_{C(Nominal)} = 24A$

$t_{SC} \geq 5\mu s, T_{J(max)} = 175^{\circ}C$

$V_{CE(on)} \text{ typ.} = 1.57V$

AUIRGB4062D1  
TO-220AB

AUIRGS4062D1  
D²Pak

AUIRGL4062D1  
TO-262Pak

G	C	E
Gate	Collector	Emitter

Base Part Number	Package Type	Standard Pack		Orderable Part Number
		Form	Quantity	
AUIRGB4062D1	TO-220	Tube	50	AUIRGB4062D1
AUIRGL4062D1	TO-262	Tube	50	AUIRGL4062D1
AUIRGS4062D1	D² Pak	Tube	50	AUIRGS4062D1
		Tape and Reel Left	800	AUIRGS4062D1TRL
		Tape and Reel Right	800	AUIRGS4062D1TRR

**Absolute Maximum Ratings**

Stresses beyond those listed under "Absolute Maximum Ratings" may cause permanent damage to the device. These are stress ratings only; and functional operation of the device at these or any other condition beyond those indicated in the specifications is not implied. Exposure to absolute-maximum-rated conditions for extended periods may affect device reliability. The thermal resistance and power dissipation ratings are measured under board mounted and still air conditions. Ambient temperature ( $T_A$ ) is 25°C, unless otherwise specified.

	Parameter	Max.	Units
$V_{CES}$	Collector-to-Emitter Voltage	600	V
$I_C @ T_C = 25^{\circ}C$	Continuous Collector Current	59	A
$I_C @ T_C = 100^{\circ}C$	Continuous Collector Current	39	
$I_C (Nominal)$	Nominal Current	24	
$I_{CM}$	Pulse Collector Current $V_{GE} = 15V$	72	
$I_{LM}$	Clamped Inductive Load Current $V_{GE} = 20V$ ①	96	
$I_F @ T_C = 25^{\circ}C$	Diode Continuous Forward Current	59	
$I_F @ T_C = 100^{\circ}C$	Diode Continuous Forward Current	39	
$I_{FM}$	Maximum Repetitive Forward Current ②	96	V
$V_{GE}$	Continuous Gate-to-Emitter Voltage	$\pm 20$	
	Transient Gate-to-Emitter Voltage	$\pm 30$	
$P_D @ T_C = 25^{\circ}C$	Maximum Power Dissipation	246	W
$P_D @ T_C = 100^{\circ}C$	Maximum Power Dissipation	123	
$T_J$	Operating Junction and	-55 to +175	°C
$T_{STG}$	Storage Temperature Range		
	Soldering Temperature, for 10 sec.	300 (0.063 in.(1.6mm) from case)	
	Mounting Torque, 6-32 or M3 Screw	10 lbf·in (1.1 N·m)	

**Thermal Resistance**

	Parameter	Min.	Typ.	Max.	Units
$R_{\theta JC}$ (IGBT)	Thermal Resistance Junction-to-Case (IGBT) ③	—	—	0.61	°C/W
$R_{\theta JC}$ (Diode)	Thermal Resistance Junction-to-Case (Diode) ③	—	—	1.2	
$R_{\theta CS}$	Thermal Resistance, Case-to-Sink (flat, greased surface)	—	0.50	—	
$R_{\theta JA}$	Thermal Resistance, Junction-to-Ambient (typical socket mount)	—	62	—	

\* Qualification standards can be found at [www.infineon.com](http://www.infineon.com)

**Electrical Characteristics @ T<sub>J</sub> = 25°C (unless otherwise specified)**

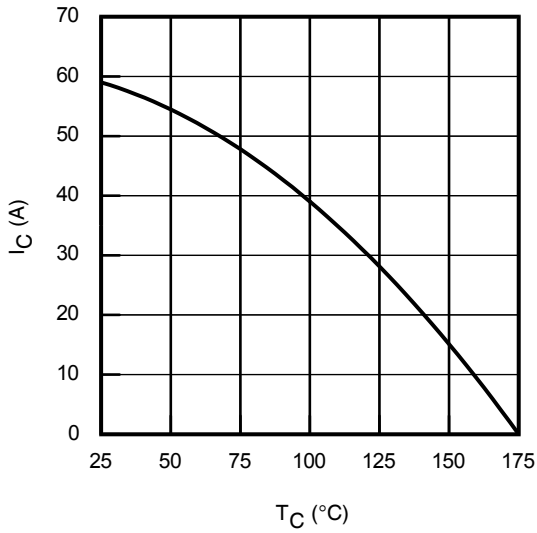
	Parameter	Min.	Typ.	Max.	Units	Conditions
V <sub>(BR)CES</sub>	Collector-to-Emitter Breakdown Voltage	600	—	—	V	V <sub>GE</sub> = 0V, I <sub>C</sub> = 100μA <sup>③</sup>
ΔV <sub>(BR)CES</sub> /ΔT <sub>J</sub>	Temperature Coeff. of Breakdown Voltage	—	0.3	—	V/°C	V <sub>GE</sub> = 0V, I <sub>C</sub> = 10mA (25°C-175°C)
V <sub>CE(on)</sub>	Collector-to-Emitter Saturation Voltage	—	1.57	1.77	V	I <sub>C</sub> = 24A, V <sub>GE</sub> = 15V, T <sub>J</sub> = 25°C
		—	1.87	—		I <sub>C</sub> = 24A, V <sub>GE</sub> = 15V, T <sub>J</sub> = 150°C
		—	1.94	—		I <sub>C</sub> = 24A, V <sub>GE</sub> = 15V, T <sub>J</sub> = 175°C
V <sub>GE(th)</sub>	Gate Threshold Voltage	4.0	—	6.5	V	V <sub>CE</sub> = V <sub>GE</sub> , I <sub>C</sub> = 700μA
ΔV <sub>GE(th)</sub> /ΔT <sub>J</sub>	Threshold Voltage temp. coefficient	—	-17	—	mV/°C	V <sub>CE</sub> = V <sub>GE</sub> , I <sub>C</sub> = 1.0mA (25°C-175°C)
g <sub>fe</sub>	Forward Transconductance	—	12	—	S	V <sub>CE</sub> = 50V, I <sub>C</sub> = 24A, PW = 20μs
I <sub>CES</sub>	Collector-to-Emitter Leakage Current	—	1.0	25	μA	V <sub>GE</sub> = 0V, V <sub>CE</sub> = 600V
		—	3.5	—	mA	V <sub>GE</sub> = 0V, V <sub>CE</sub> = 600V, T <sub>J</sub> = 175°C
V <sub>FM</sub>	Diode Forward Voltage Drop	—	1.57	—	V	I <sub>F</sub> = 24A
		—	1.40	—		I <sub>F</sub> = 19A
		—	1.47	—		I <sub>F</sub> = 24A, T <sub>J</sub> = 175°C
I <sub>GES</sub>	Gate-to-Emitter Leakage Current	—	—	±100	nA	V <sub>GE</sub> = ±20V, V <sub>CE</sub> = 0V

**Switching Characteristics @ T<sub>J</sub> = 25°C (unless otherwise specified)**

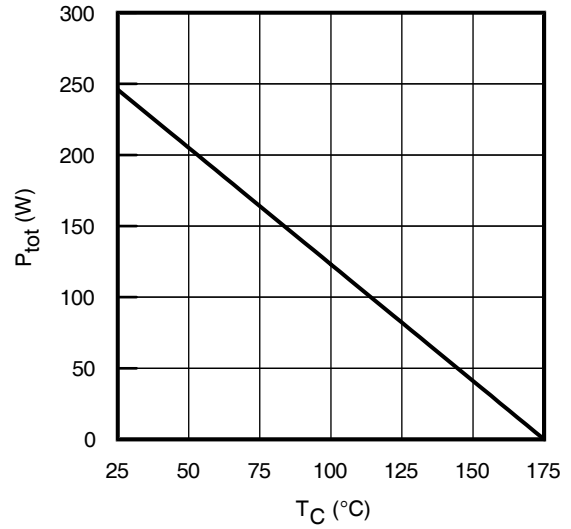
	Parameter	Min.	Typ.	Max.	Units	Conditions
Q <sub>g</sub>	Total Gate Charge (turn-on)	—	51	77	nC	I <sub>C</sub> = 24A
Q <sub>ge</sub>	Gate-to-Emitter Charge (turn-on)	—	14	21		V <sub>GE</sub> = 15V
Q <sub>gc</sub>	Gate-to-Collector Charge (turn-on)	—	21	32		V <sub>CC</sub> = 400V
E <sub>on</sub>	Turn-On Switching Loss	—	532	754	μJ	I <sub>C</sub> = 24A, V <sub>CC</sub> = 400V, V <sub>GE</sub> = +15V, R <sub>G</sub> = 10Ω, L = 210μH, T <sub>J</sub> = 25°C
E <sub>off</sub>	Turn-Off Switching Loss	—	311	526		
E <sub>total</sub>	Total Switching Loss	—	843	1280		
t <sub>d(on)</sub>	Turn-On delay time	—	19	36	ns	Energy losses include tail & diode reverse recovery
t <sub>r</sub>	Rise time	—	24	41		
t <sub>d(off)</sub>	Turn-Off delay time	—	90	109		
t <sub>f</sub>	Fall time	—	23	40		
E <sub>on</sub>	Turn-On Switching Loss	—	726	—	μJ	I <sub>C</sub> = 24A, V <sub>CC</sub> = 400V, V <sub>GE</sub> = +15V, R <sub>G</sub> = 10Ω, L = 210μH, T <sub>J</sub> = 175°C <sup>③</sup>
E <sub>off</sub>	Turn-Off Switching Loss	—	549	—		
E <sub>total</sub>	Total Switching Loss	—	1275	—		
t <sub>d(on)</sub>	Turn-On delay time	—	12	—	ns	Energy losses include tail & diode reverse recovery
t <sub>r</sub>	Rise time	—	23	—		
t <sub>d(off)</sub>	Turn-Off delay time	—	92	—		
t <sub>f</sub>	Fall time	—	84	—		
C <sub>ies</sub>	Input Capacitance	—	1487	—	pF	V <sub>GE</sub> = 0V V <sub>CC</sub> = 30V f = 1.0Mhz
C <sub>oes</sub>	Output Capacitance	—	118	—		
C <sub>res</sub>	Reverse Transfer Capacitance	—	44	—		
RBSOA	Reverse Bias Safe Operating Area	FULL SQUARE				T <sub>J</sub> = 175°C, I <sub>C</sub> = 96A V <sub>CC</sub> = 480V, V <sub>p</sub> ≤ 600V R <sub>g</sub> = 10Ω, V <sub>GE</sub> = +20V to 0V
SCSOA	Short Circuit Safe Operating Area	5	—	—	μs	V <sub>CC</sub> = 400V, V <sub>p</sub> ≤ 600V R <sub>g</sub> = 10Ω, V <sub>GE</sub> = +15V to 0V
E <sub>rec</sub>	Reverse Recovery Energy of the Diode	—	773	—	μJ	T <sub>J</sub> = 175°C
t <sub>rr</sub>	Diode Reverse Recovery Time	—	102	—	ns	V <sub>CC</sub> = 400V, I <sub>F</sub> = 24A, V <sub>GE</sub> = 15V,
I <sub>rr</sub>	Peak Reverse Recovery Current	—	32	—	A	R <sub>G</sub> = 10Ω, L = 210μH

**Notes:**

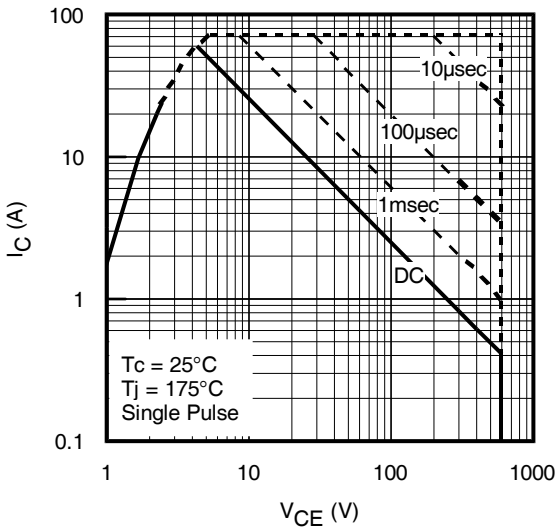
- ① V<sub>CC</sub> = 80% (V<sub>CES</sub>), V<sub>GE</sub> = 20V, L = 210μH, R<sub>G</sub> = 50Ω.
- ② Pulse width limited by max. junction temperature.
- ③ R<sub>θ</sub> is measured at T<sub>J</sub> of approximately 90°C.
- ④ Maximum limits are based on statistical sample size characterization.



**Fig. 1** - Maximum DC Collector Current vs. Case Temperature

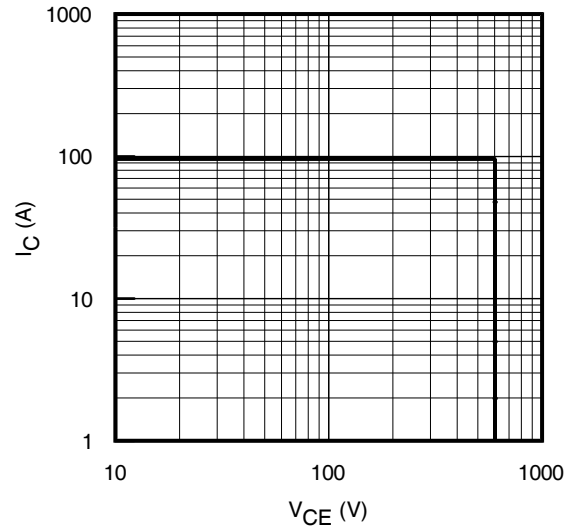


**Fig. 2** - Power Dissipation vs. Case Temperature



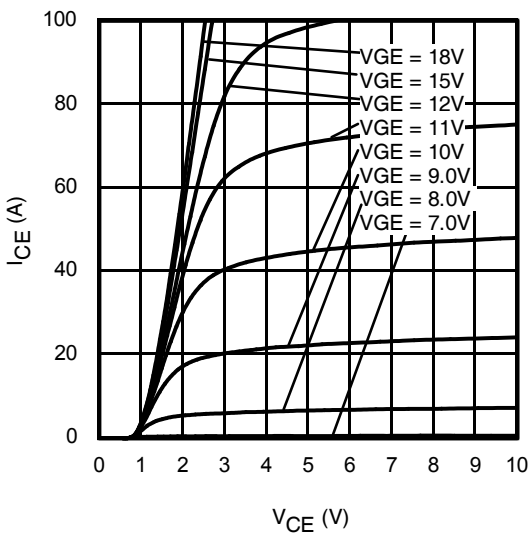
**Fig. 3** - Forward SOA

$T_C = 25^\circ\text{C}$ ,  $T_J \leq 175^\circ\text{C}$ ;  $V_{GE} = 15\text{V}$



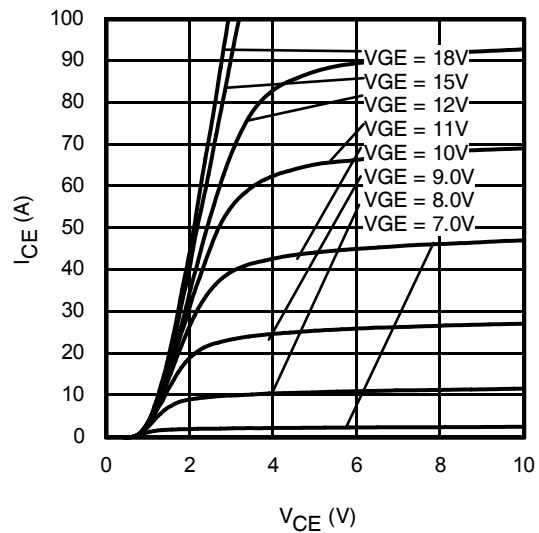
**Fig. 4** - Reverse Bias SOA

$T_J = 175^\circ\text{C}$ ;  $V_{GE} = 20\text{V}$



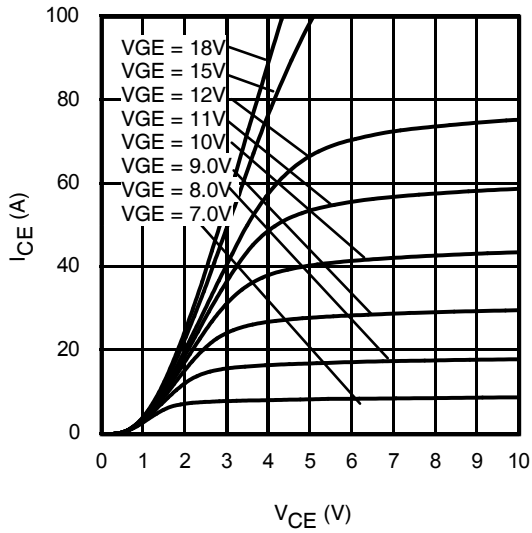
**Fig. 5** - Typ. IGBT Output Characteristics

$T_J = -40^\circ\text{C}$ ;  $t_p = 20\mu\text{s}$

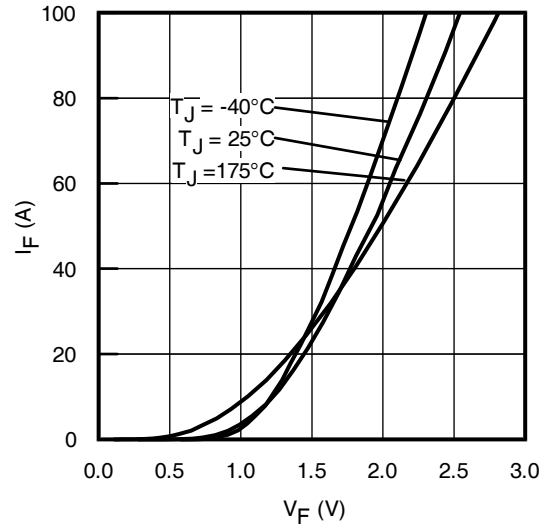


**Fig. 6** - Typ. IGBT Output Characteristics

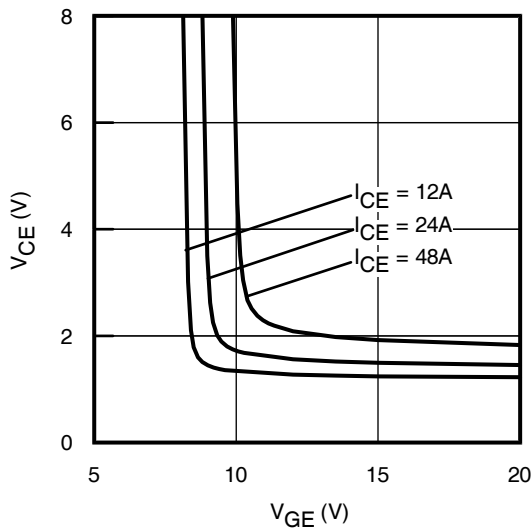
$T_J = 25^\circ\text{C}$ ;  $t_p = 20\mu\text{s}$



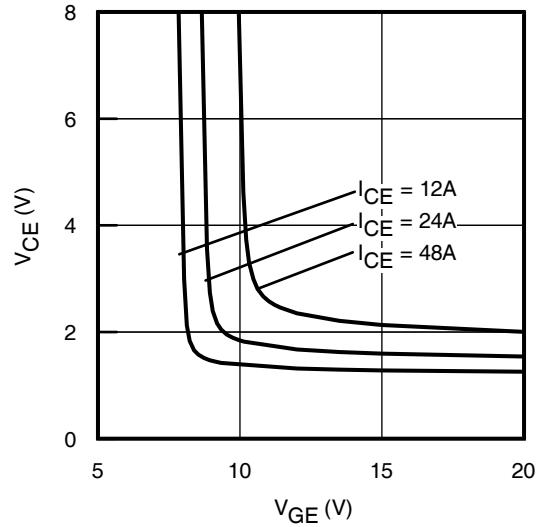
**Fig. 7 - Typ. IGBT Output Characteristics**  
 $T_J = 175^\circ\text{C}$ ;  $t_p = 20\mu\text{s}$



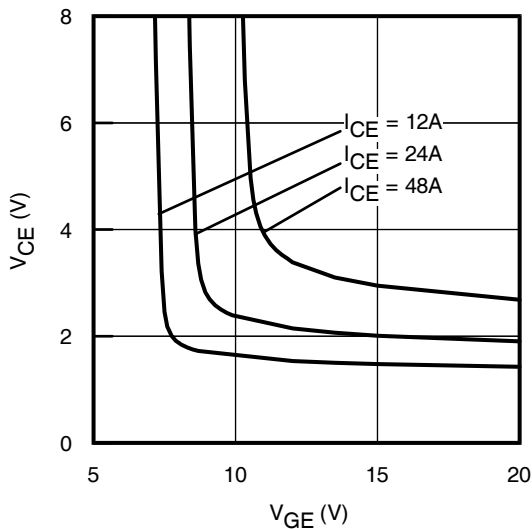
**Fig. 8 - Typ. Diode Forward Characteristics**  
 $t_p = 20\mu\text{s}$



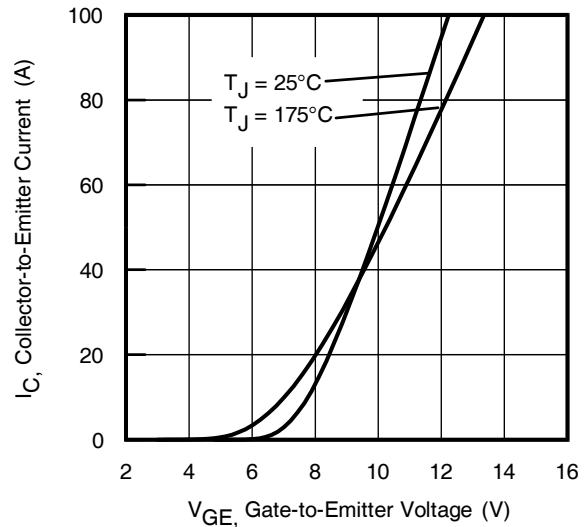
**Fig. 9 - Typical  $V_{CE}$  vs.  $V_{GE}$**   
 $T_J = -40^\circ\text{C}$



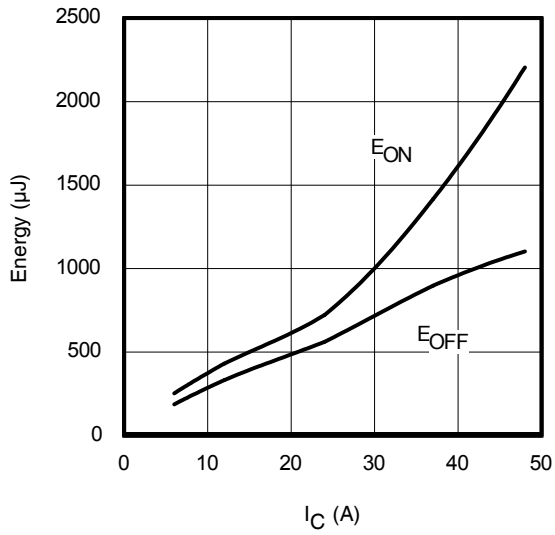
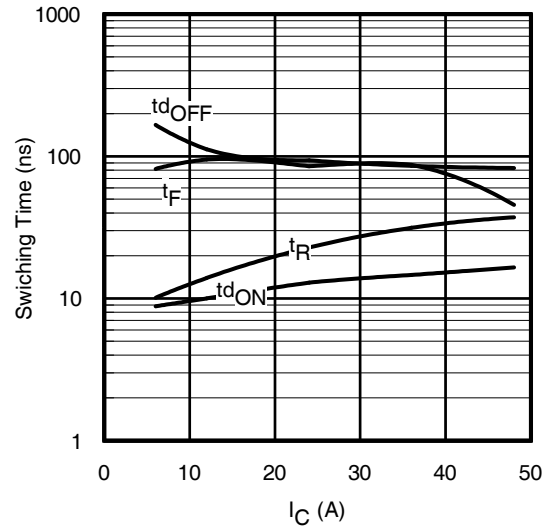
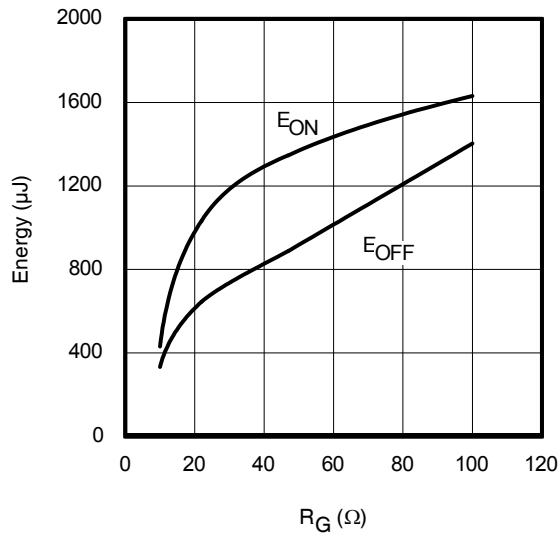
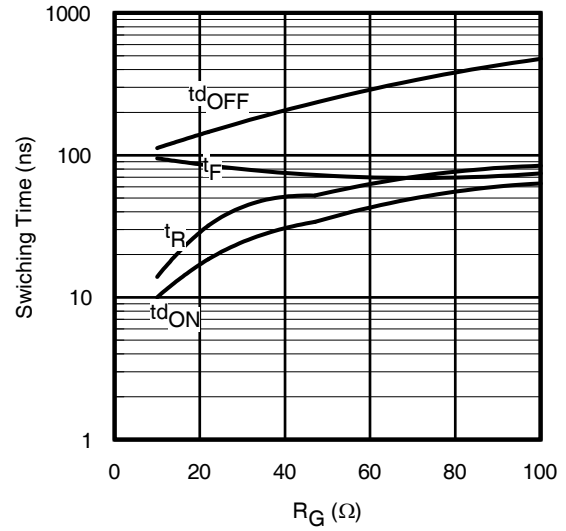
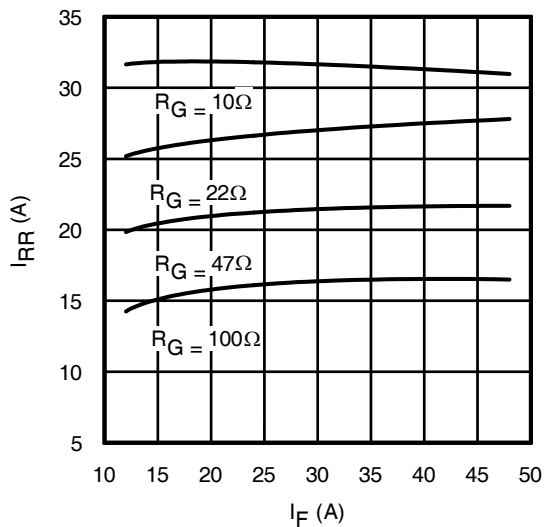
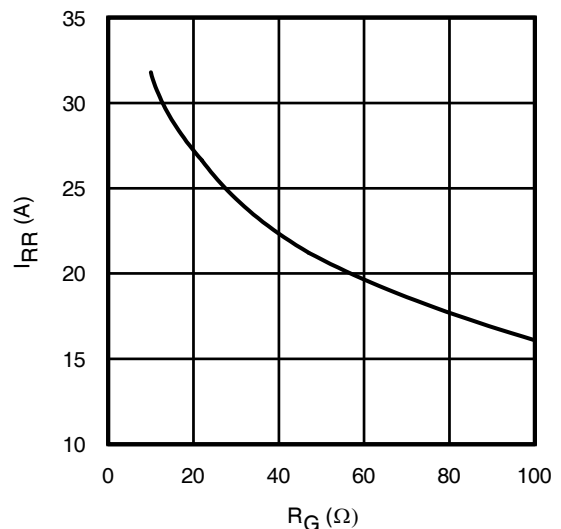
**Fig. 10 - Typical  $V_{CE}$  vs.  $V_{GE}$**   
 $T_J = 25^\circ\text{C}$

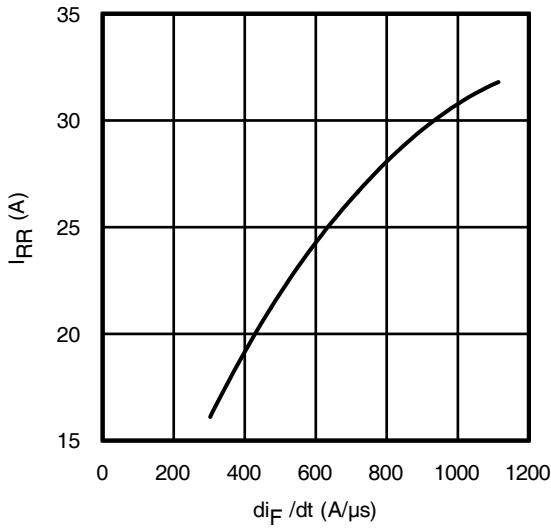


**Fig. 11 - Typical  $V_{CE}$  vs.  $V_{GE}$**   
 $T_J = 175^\circ\text{C}$

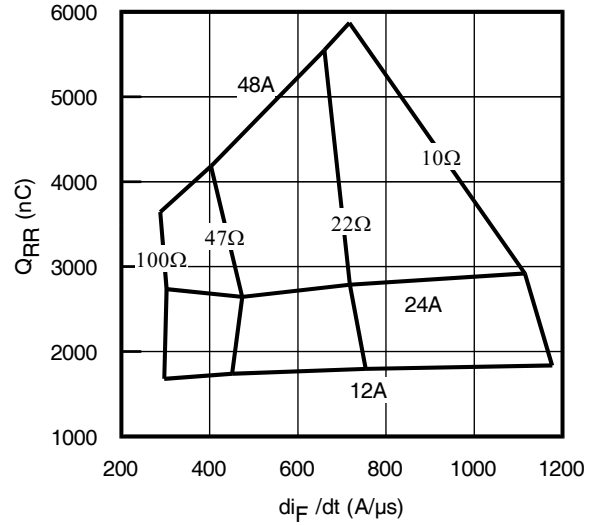


**Fig. 12 - Typ. Transfer Characteristics**  
 $V_{CE} = 50\text{V}$ ;  $t_p = 20\mu\text{s}$

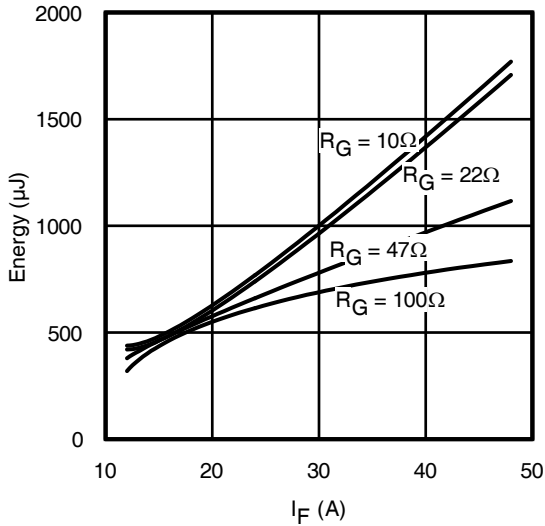

**Fig. 13 - Typ. Energy Loss vs.  $I_C$** 
 $T_J = 175^\circ\text{C}; L = 210\mu\text{H}; V_{CE} = 400\text{V}, R_G = 10\Omega; V_{GE} = 15\text{V}$ 

**Fig. 14 - Typ. Switching Time vs.  $I_C$** 
 $T_J = 175^\circ\text{C}; L = 210\mu\text{H}; V_{CE} = 400\text{V}, R_G = 10\Omega; V_{GE} = 15\text{V}$ 

**Fig. 15 - Typ. Energy Loss vs.  $R_G$** 
 $T_J = 175^\circ\text{C}; L = 210\mu\text{H}; V_{CE} = 400\text{V}, I_{CE} = 24\text{A}; V_{GE} = 15\text{V}$ 

**Fig. 16 - Typ. Switching Time vs.  $R_G$** 
 $T_J = 175^\circ\text{C}; L = 210\mu\text{H}; V_{CE} = 400\text{V}, I_{CE} = 24\text{A}; V_{GE} = 15\text{V}$ 

**Fig. 17 - Typ. Diode  $I_{RR}$  vs.  $I_F$**   
 $T_J = 175^\circ\text{C}$ 

**Fig. 18 Typ. Diode  $I_{RR}$  vs.  $R_G$**   
 $T_J = 175^\circ\text{C}$



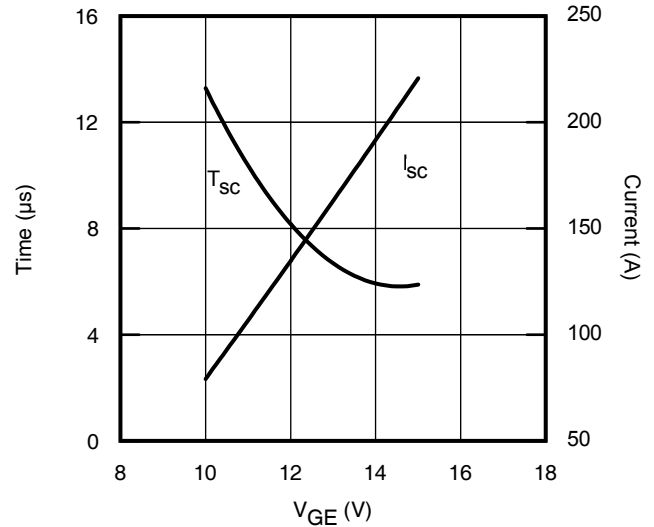
**Fig. 19** - Typ. Diode  $I_{RR}$  vs.  $dI_F/dt$   
 $V_{CC} = 400V$ ;  $V_{GE} = 15V$ ;  $I_F = 24A$ ;  $T_J = 175^\circ C$



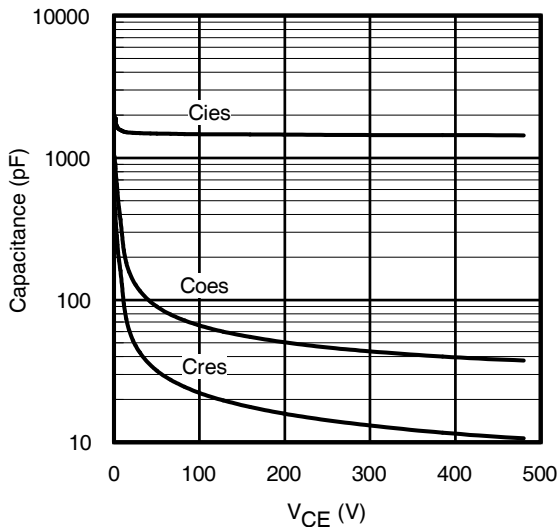
**Fig. 20** - Typ. Diode  $Q_{RR}$  vs.  $dI_F/dt$   
 $V_{CC} = 400V$ ;  $V_{GE} = 15V$ ;  $T_J = 175^\circ C$



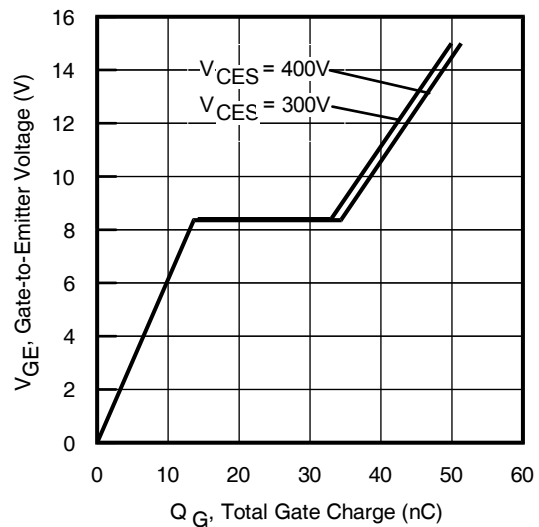
**Fig. 21** - Typ. Diode  $E_{RR}$  vs.  $I_F$   
 $T_J = 175^\circ C$



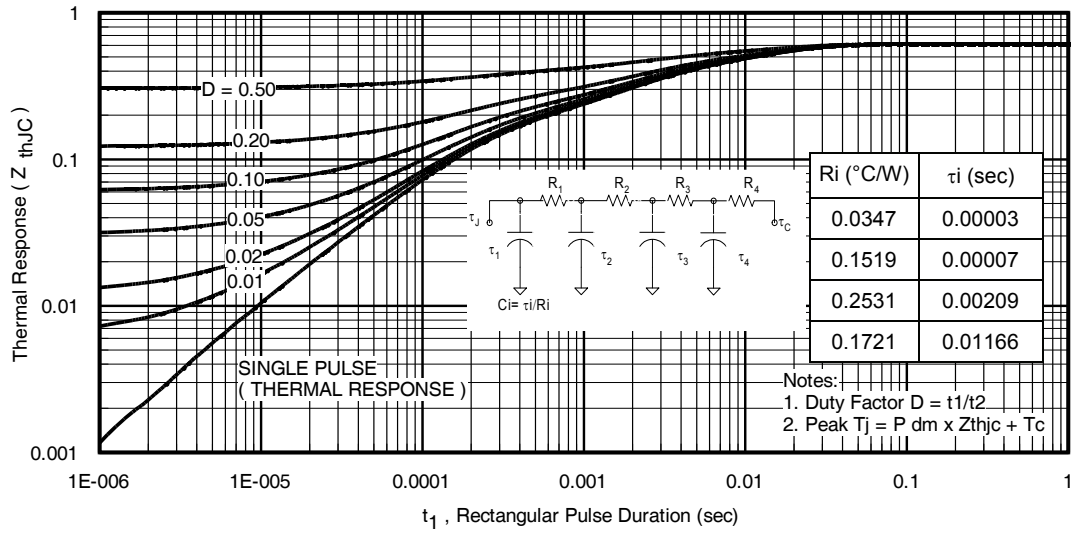
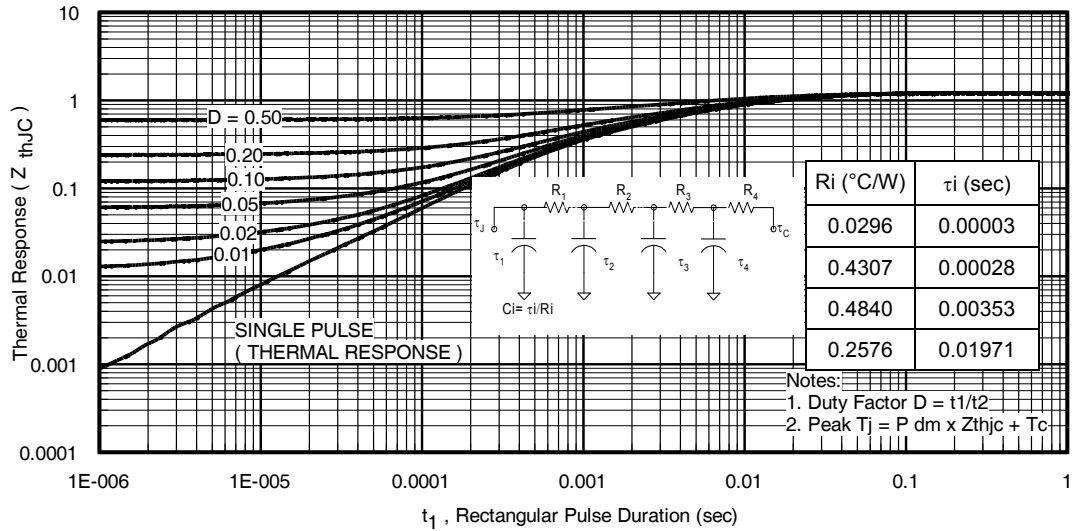
**Fig. 22** -  $V_{GE}$  vs. Short Circuit Time  
 $V_{CC} = 400V$ ;  $T_C = 25^\circ C$

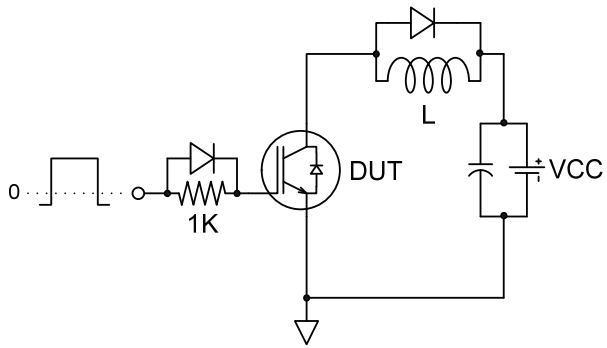
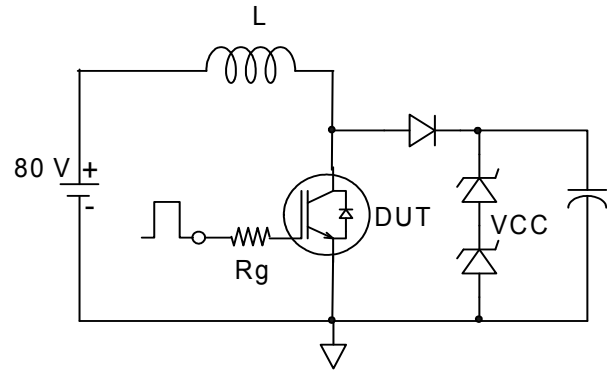
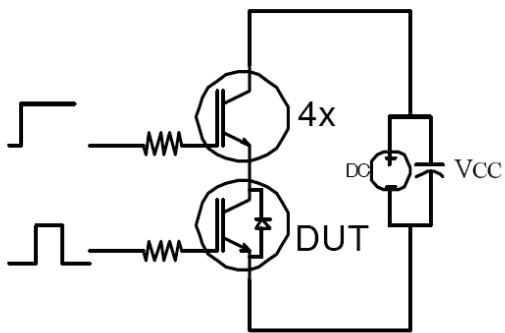
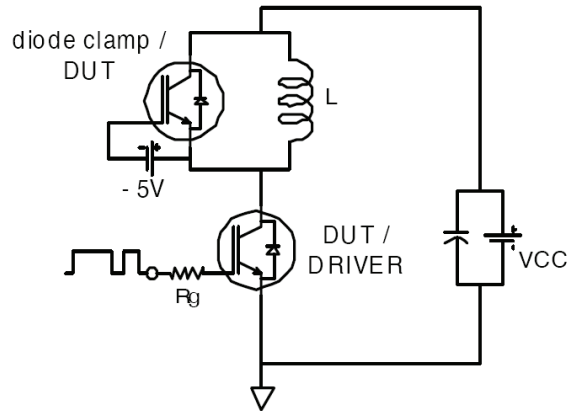
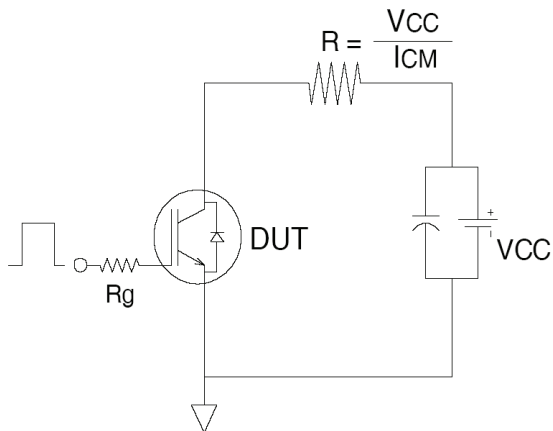


**Fig. 23** - Typ. Capacitance vs.  $V_{CE}$   
 $V_{GE} = 0V$ ;  $f = 1MHz$

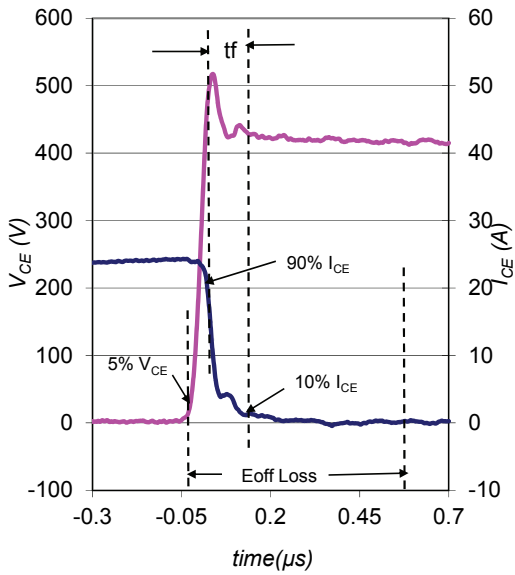


**Fig. 24** - Typical Gate Charge vs.  $V_{GE}$   
 $I_{CE} = 24A$ ;  $L = 585\mu H$

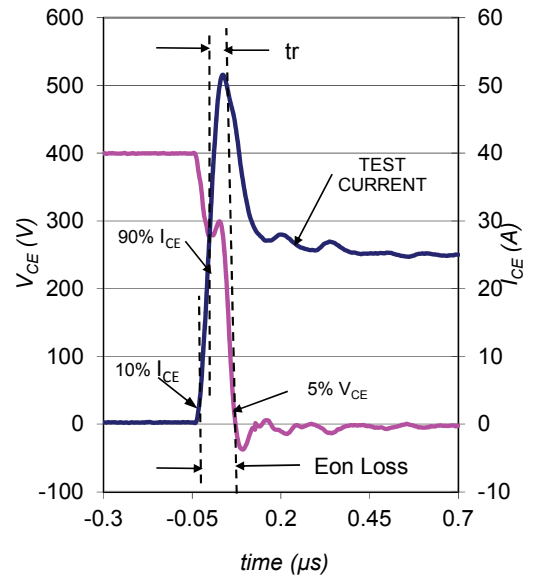

**Fig 25. Maximum Transient Thermal Impedance, Junction-to-Case (IGBT)**

**Fig 26. Maximum Transient Thermal Impedance, Junction-to-Case (DIODE)**


**Fig.C.T.1 - Gate Charge Circuit (turn-off)**

**Fig.C.T.2 - RBSOA Circuit**

**Fig.C.T.3 - S.C. SOA Circuit**

**Fig.C.T.4 - Switching Loss Circuit**

**Fig.C.T.5 - Resistive Load Circuit**

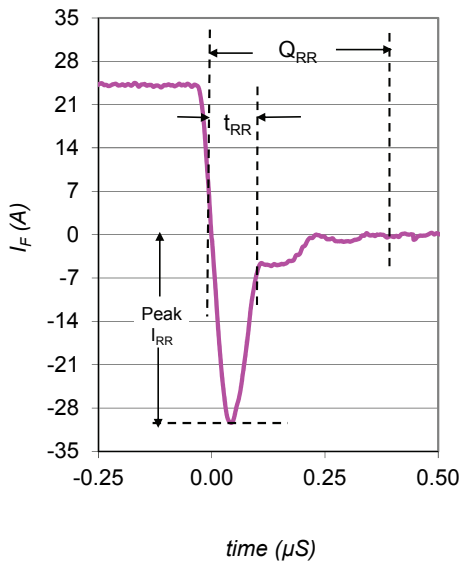




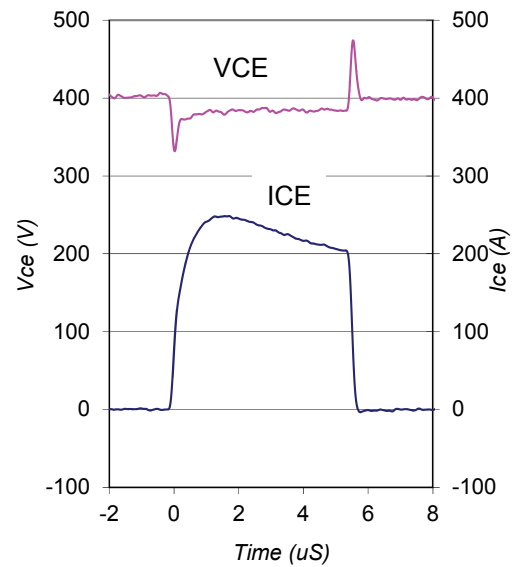
**Fig. WF1** - Typ. Turn-off Loss Waveform  
@  $T_J = 175^\circ\text{C}$  using Fig. CT.4



**Fig. WF2** - Typ. Turn-on Loss Waveform  
@  $T_J = 175^\circ\text{C}$  using Fig. CT.4



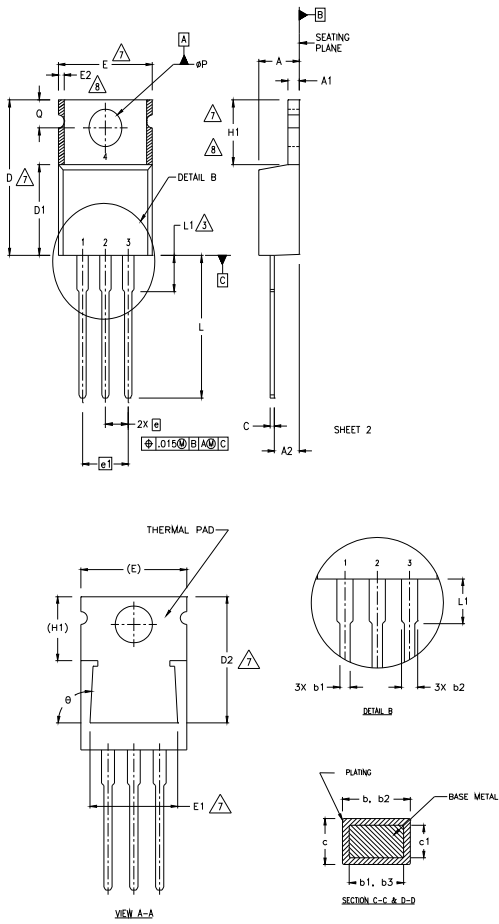
**Fig. WF3** - Typ. Diode Recovery Waveform  
@  $T_J = 175^\circ\text{C}$  using Fig. CT.4



**Fig. WF4** - Typ. S.C. Waveform  
@  $T_J = 25^\circ\text{C}$  using Fig. CT.3

# TO-220AB Package Outline

(Dimensions are shown in millimeters (inches))



**NOTES:**

- 1 DIMENSIONING AND TOLERANCING PER ASME Y14.5 M- 1994.
- 2 DIMENSIONS ARE SHOWN IN INCHES (MILLIMETERS).
- 3 LEAD DIMENSION AND FINISH UNCONTROLLED IN L1.
- 4 DIMENSION D & E DO NOT INCLUDE MOLD FLASH. MOLD FLASH SHALL NOT EXCEED .005" (0.127) PER SIDE. THESE DIMENSIONS ARE MEASURED AT THE OUTERMOST EXTREMES OF THE PLASTIC BODY.
- 5 DIMENSION b1 & c1 APPLY TO BASE METAL ONLY.
- 6 CONTROLLING DIMENSION : INCHES.
- 7 THERMAL PAD CONTOUR OPTIONAL WITHIN DIMENSIONS E,H1,D2 & E1
- 8 DIMENSION E2 X H1 DEFINE A ZONE WHERE STAMPING AND SINGULATION IRREGULARITIES ARE ALLOWED.

**LEAD ASSIGNMENTS**

**HEFEET**

- 1- GATE
- 2- DRAIN
- 3- SOURCE

**ISBES\_CoPACK**

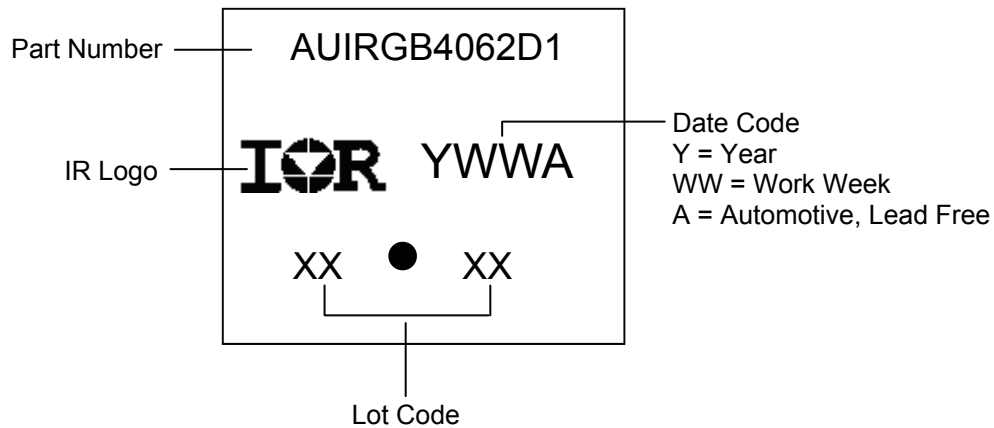
- 1- GATE
- 2- COLLECTOR
- 3- EMITTER

**DIODES**

- 1- ANODE/OPEN
- 2- CATHODE
- 3- ANODE

SYMBOL	DIMENSIONS				NOTES
	MILLIMETERS		INCHES		
	MIN.	MAX.	MIN.	MAX.	
A	3.56	4.82	.140	.190	
A1	0.51	1.40	.020	.055	
A2	2.04	2.92	.080	.115	
b	0.38	1.01	.015	.040	
b1	0.38	0.96	.015	.038	5
b2	1.15	1.77	.045	.070	
b3	1.15	1.73	.045	.068	
c	0.36	0.61	.014	.024	
c1	0.36	0.56	.014	.022	5
D	14.22	16.51	.560	.650	4
D1	8.38	9.02	.330	.355	
D2	12.19	12.88	.480	.507	7
E	9.66	10.66	.380	.420	4,7
E1	8.38	8.89	.330	.350	7
e	2.54 BSC		.100 BSC		
e1	5.08		.200 BSC		
H1	5.85	6.55	.230	.270	7,8
L	12.70	14.73	.500	.580	
L1	-	6.35	-	.250	3
øP	3.54	4.08	.139	.161	
Q	2.54	3.42	.100	.135	
φ	90°-93°		90°-93°		

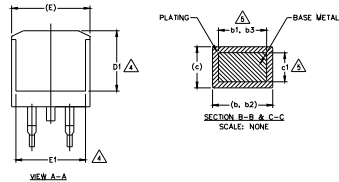
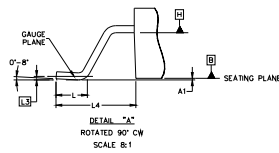
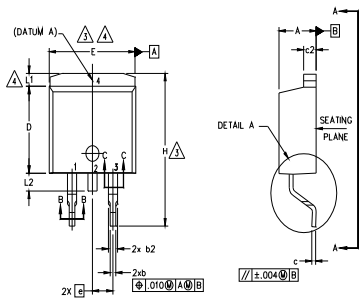
## TO-220AB Part Marking Information



TO-220AC package is not recommended for Surface Mount Application.

## D2 Pak (TO-263AB) Package Outline

(Dimensions are shown in millimeters (inches))



**NOTES:**

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994
2. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
3. DIMENSION D & E DO NOT INCLUDE MOLD FLASH. MOLD FLASH SHALL NOT EXCEED 0.127 [0.005"] PER SIDE. THESE DIMENSIONS ARE MEASURED AT THE OUTMOST EXTREMES OF THE PLASTIC BODY AT DATUM H.
4. THERMAL PAD CONTOUR OPTIONAL WITHIN DIMENSION E, L1, D1 & E1.
5. DIMENSION b1 AND c1 APPLY TO BASE METAL ONLY.
6. DATUM A & B TO BE DETERMINED AT DATUM PLANE H.
7. CONTROLLING DIMENSION: INCH.
8. OUTLINE CONFORMS TO JEDEC OUTLINE TO-263AB.

SYMBOL	DIMENSIONS				NOTES
	MILLIMETERS		INCHES		
	MIN.	MAX.	MIN.	MAX.	
A	4.06	4.83	.160	.190	
A1	0.00	0.254	.000	.010	
b	0.51	0.99	.020	.039	
b1	0.51	0.89	.020	.035	5
b2	1.14	1.78	.045	.070	
b3	1.14	1.73	.045	.068	5
c	0.38	0.74	.015	.029	
c1	0.38	0.58	.015	.023	5
c2	1.14	1.65	.045	.065	
D	8.38	9.65	.330	.380	3
D1	6.86	-	.270	-	4
E	9.65	10.67	.380	.420	3,4
E1	6.22	-	.245	-	4
e	2.54 BSC		.100 BSC		
H	14.61	15.88	.575	.625	
L	1.78	2.79	.070	.110	
L1	-	1.65	-	.066	4
L2	1.27	1.78	-	.070	
L3	0.25 BSC		.010 BSC		
L4	4.78	5.28	.188	.208	

**LEAD ASSIGNMENTS**

**HEXFET**

- 1.- GATE
- 2, 4.- DRAIN
- 3.- SOURCE

**IGBTs, CoPACK**

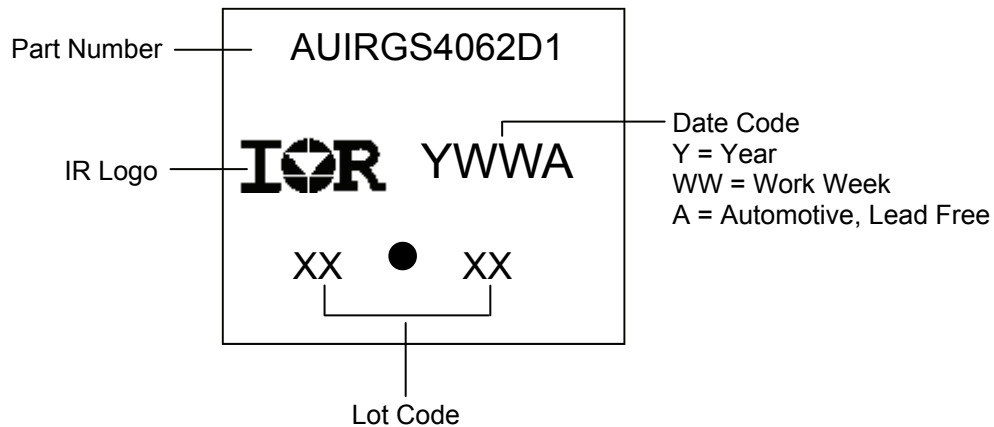
- 1.- GATE
- 2, 4.- COLLECTOR
- 3.- EMITTER

**DIODES**

- 1.- ANODE \*
- 2, 4.- CATHODE
- 3.- ANODE

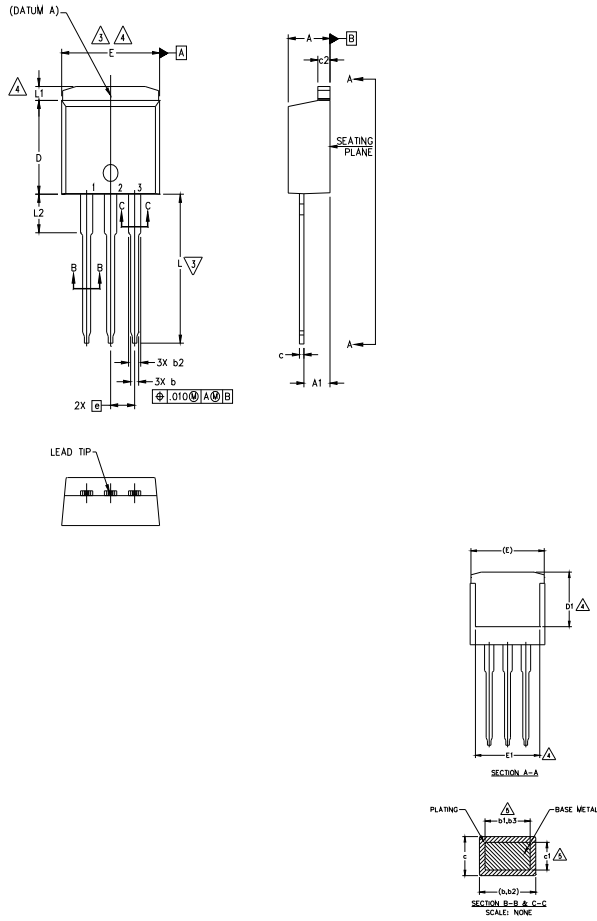
\* PART DEPENDENT.

## D2 Pak (TO-263AB) Part Marking Information



# TO-262 Package Outline

(Dimensions are shown in millimeters (inches))



**NOTES:**

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994
2. DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
3. DIMENSION D & E DO NOT INCLUDE MOLD FLASH. MOLD FLASH SHALL NOT EXCEED 0.127 [0.005"] PER SIDE. THESE DIMENSIONS ARE MEASURED AT THE OUTMOST EXTREMES OF THE PLASTIC BODY.
4. THERMAL PAD CONTOUR OPTIONAL WITHIN DIMENSION E, L1, D1 & E1.
5. DIMENSION b1 AND c1 APPLY TO BASE METAL ONLY.
6. CONTROLLING DIMENSION: INCH.
7. OUTLINE CONFORM TO JEDEC TO-262 EXCEPT A1(max.), b(min.) AND D1(min.) WHERE DIMENSIONS DERIVED THE ACTUAL PACKAGE OUTLINE.

SYMBOL	DIMENSIONS				NOTES
	MILLIMETERS		INCHES		
	MIN.	MAX.	MIN.	MAX.	
A	4.06	4.83	.160	.190	5
A1	2.03	3.02	.080	.119	
b	0.51	0.99	.020	.039	
b1	0.51	0.89	.020	.035	
b2	1.14	1.78	.045	.070	
b3	1.14	1.73	.045	.068	
c	0.38	0.74	.015	.029	
c1	0.38	0.58	.015	.023	
c2	1.14	1.65	.045	.065	
D	8.38	9.65	.330	.380	
D1	6.86	-	.270	-	4
E	9.65	10.67	.380	.420	3,4
E1	6.22	-	.245	-	4
e	2.54 BSC		.100 BSC		
L	13.46	14.10	.530	.555	4
L1	-	1.65	-	.065	
L2	3.56	3.71	.140	.146	

LEAD ASSIGNMENTS

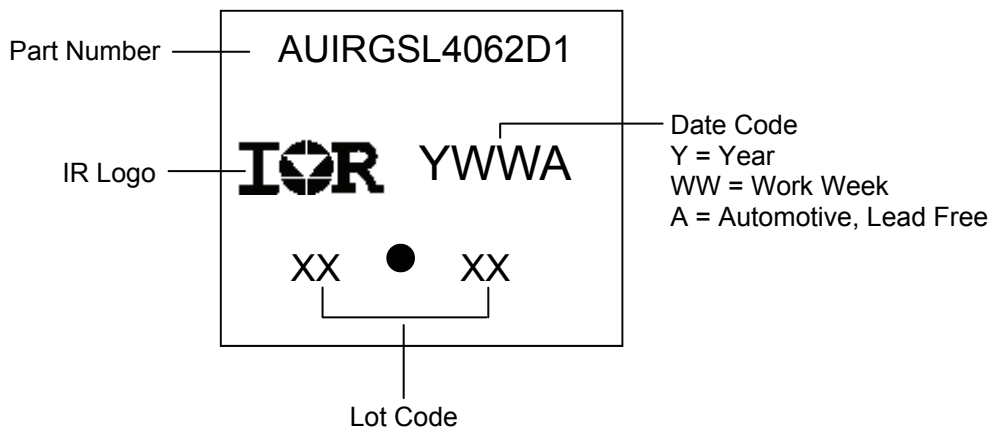
HEXFET

- 1.- GATE
- 2.- DRAIN
- 3.- SOURCE
- 4.- DRAIN

IGBTs, CoPACK

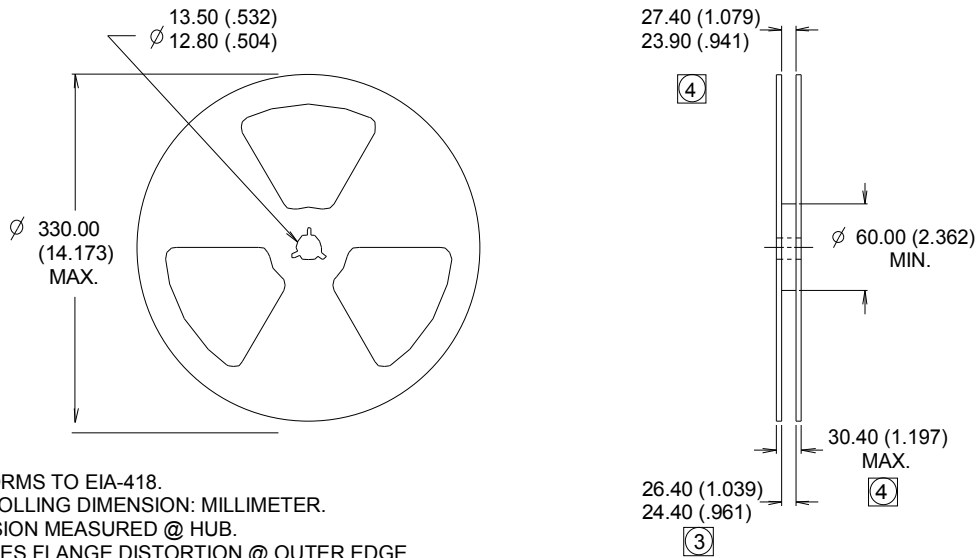
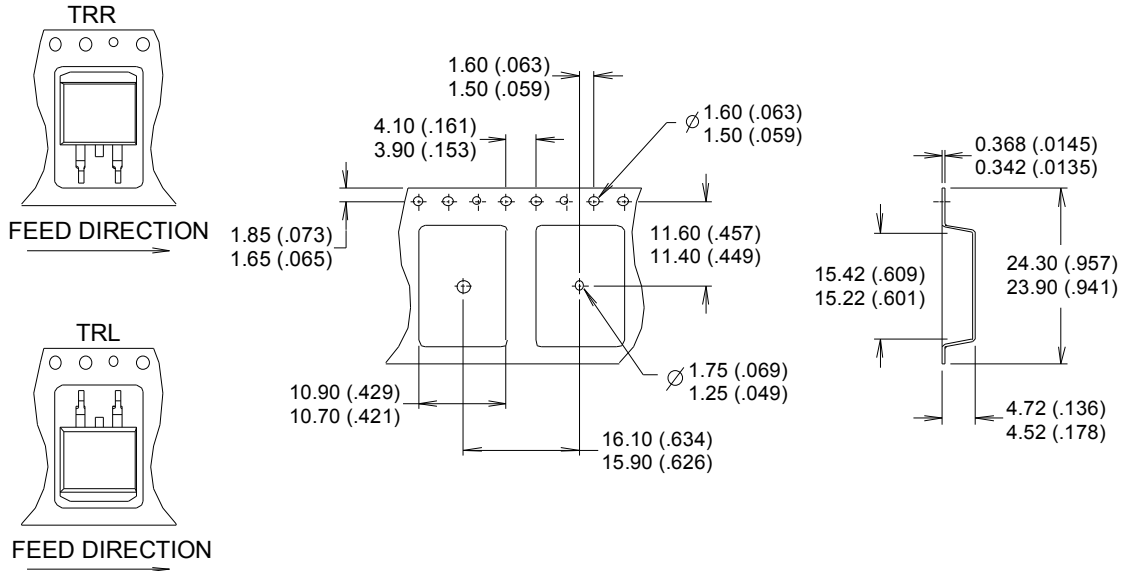
- 1.- GATE
- 2.- COLLECTOR
- 3.- EMITTER
- 4.- COLLECTOR

## TO-262 Part Marking Information



## D2Pak Tape & Reel Information

(Dimensions are shown in millimeters (inches))



**NOTES :**

1. COMFORMS TO EIA-418.
2. CONTROLLING DIMENSION: MILLIMETER.
3. DIMENSION MEASURED @ HUB.
4. INCLUDES FLANGE DISTORTION @ OUTER EDGE.

**Qualification Information**

<b>Qualification Level</b>		Automotive (per AEC-Q101)	
		This part number(s) passed Automotive qualification. Infineon's Industrial and Consumer qualification level is granted by extension of the higher Automotive level.	
<b>Moisture Sensitivity Level</b>		3L-TO-220	N/A
		3L-TO-262	
		3L-D2 PAK	MSL1
<b>ESD</b>	Machine Model	Class M4(+/- 700V) <sup>†</sup> AEC-Q101-002	
	Human Body Model	Class H1C(+/- 2000V) <sup>†</sup> AEC-Q101-001	
	Charged Device Model	Class C5 (+/- 2000V) <sup>†</sup> AEC-Q101-005	
<b>RoHS Compliant</b>		Yes	

† Highest passing voltage.

**Revision History**

Date	Comments
8/31/2017	<ul style="list-style-type: none"> <li>Updated datasheet with corporate template</li> <li>Corrected part marking on pages 10,11, 12</li> </ul>

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