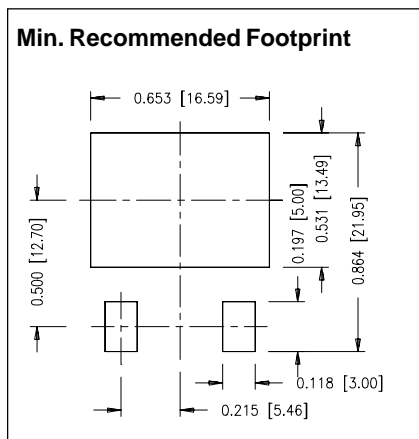


Symbol	Test Conditions	Characteristic Values			
		(T _J = 25°C, unless otherwise specified)			
		min.	typ.	max.	
g_{fs}	I _C = I _{C90} , V _{CE} = 10 V, Pulse test, t ≤ 300 μs, duty cycle ≤ 2 %	8	12.5	S	
C_{ies}	V _{CE} = 25 V, V _{GE} = 0 V, f = 1 MHz		1400	pF	
C_{oes}			90	pF	
C_{res}			31	pF	
Q_g	I _C = I _{C90} , V _{GE} = 15 V, V _{CE} = 0.5 V _{CES}		65	nC	
Q_{ge}			13	nC	
Q_{gc}			22	nC	
t_{d(on)}	Inductive load, T_J = 25°C I _C = I _{C90} , V _{GE} = 15 V V _{CE} = 0.8 V _{CES} , R _G = R _{off} = 10 Ω Remarks: Switching times may increase for V _{CE} (Clamp) > 0.8 • V _{CES} , higher T _J or increased R _G		15	ns	
t_{ri}			25	ns	
t_{d(off)}			160	250	ns
t_{fi}			50	100	ns
E_{off}			1.2	2.5	mJ
t_{d(on)}	Inductive load, T_J = 125°C I _C = I _{C90} , V _{GE} = 15 V V _{CE} = 0.8 V _{CES} , R _G = R _{off} = 10 Ω Remarks: Switching times may increase for V _{CE} (Clamp) > 0.8 • V _{CES} , higher T _J or increased R _G		15	ns	
t_{ri}			28	ns	
E_{on}			2.0	mJ	
t_{d(off)}			220	ns	
t_{fi}			150	ns	
E_{off}		2.6	mJ		
R_{thJC}				0.83 K/W	
R_{thCK}	(TO-247)		0.25	K/W	

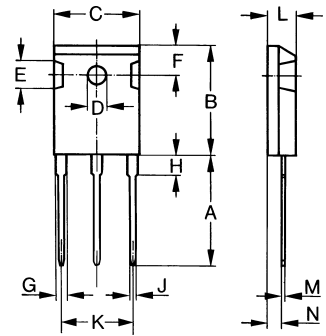
Symbol	Test Conditions	Characteristic Values		
		(T _J = 25°C, unless otherwise specified)		
		min.	typ.	max.
V_F	I _F = I _{C90} , V _{GE} = 0 V, Pulse test, t ≤ 300 us, duty cycle d ≤ 2%			5.0 V
I_{RM}	I _F = I _{C90} , V _{GE} = 0 V, -di _F /dt = 50 A/us V _R = 100V		10	A
t_{rr}			360	ns

Notes:

- Device must be heatsunk for high temperature leakage current measurements to avoid thermal runaway.
- Pulse test, t ≤ 300 μs, duty cycle ≤ 2 %.

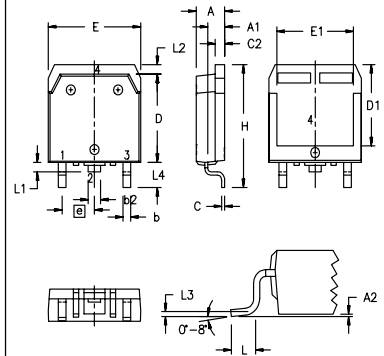


TO-247 AD Outline



Dim.	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	19.81	20.32	0.780	0.800
B	20.80	21.46	0.819	0.845
C	15.75	16.26	0.610	0.640
D	3.55	3.65	0.140	0.144
E	4.32	5.49	0.170	0.216
F	5.4	6.2	0.212	0.244
G	1.65	2.13	0.065	0.084
H	-	4.5	-	0.177
J	1.0	1.4	0.040	0.055
K	10.8	11.0	0.426	0.433
L	4.7	5.3	0.185	0.209
M	0.4	0.8	0.016	0.031
N	1.5	2.49	0.087	0.102

TO-268AA (D³ PAK)



Dim.	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.9	5.1	.193	.201
A ₁	2.7	2.9	.106	.114
A ₂	.02	.25	.001	.010
b	1.15	1.45	.045	.057
b ₂	1.9	2.1	.75	.83
C	.4	.65	.016	.026
D	13.80	14.00	.543	.551
E	15.85	16.05	.624	.632
E ₁	13.3	13.6	.524	.535
e	5.45 BSC		.215 BSC	
H	18.70	19.10	.736	.752
L	2.40	2.70	.094	.106
L ₁	1.20	1.40	.047	.055
L ₂	1.00	1.15	.039	.045
L ₃	0.25 BSC		.010 BSC	
L ₄	3.80	4.10	.150	.161



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