

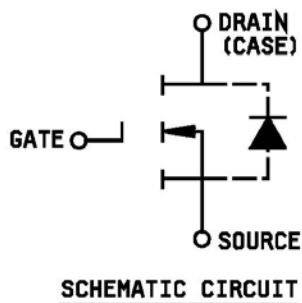
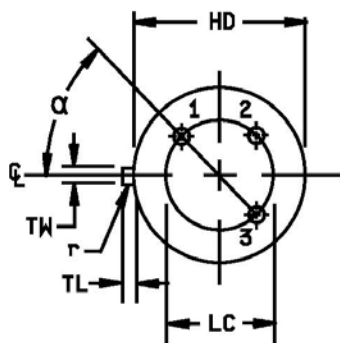
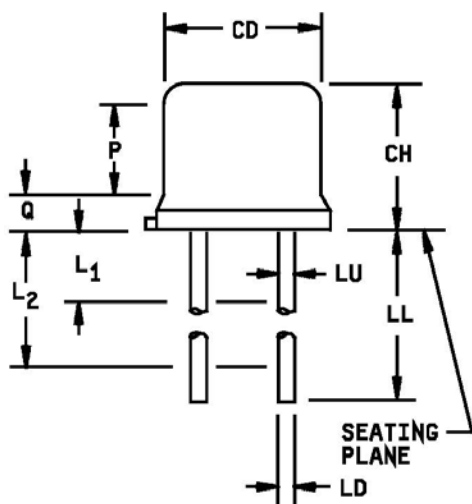
DYNAMIC CHARACTERISTICS

Parameters / Test Conditions	Symbol	Min.	Max.	Unit
Gate Charge:	$Q_{g(on)}$		5.0	nC
On-State Gate Charge	Q_{gs}		1.0	
Gate to Source Charge	Q_{gd}		2.9	
Gate to Drain Charge				

SWITCHING CHARACTERISTICS

Parameters / Test Conditions	Symbol	Min.	Max.	Unit
Switching time tests:				
Turn-on delay time	$t_{d(on)}$		25	ns
Rinse time	t_r		80	
Turn-off delay time	$t_{d(off)}$		45	
Fall time	t_f		80	
Diode Reverse Recovery Time	t_{rr}		250	ns

PACKAGE DIMENSIONS



Symbol	Dimensions				
	Inches		Millimeters		
	Min	Max	Min	Max	
CD	.305	.335	7.75	8.51	
CH	.160	.180	4.07	4.57	
HD	.335	.370	8.51	9.40	
LC	.200 TP		5.08 TP		
LD	.016	.021	0.41	0.53	8,9
LL	.500	.750	12.70	19.05	8,9
LU	.016	.019	0.41	0.48	8,9
L1		.050		1.27	8,9
L2	.250		6.35		8,9
P	.100		2.54		6
Q		.050		1.27	5
TL	.029	.045	0.74	1.14	4
TW	.028	.034	0.71	0.86	3
r		.010		0.25	10
α	45° TP		45° TP		6

NOTE:

1. Dimensions are in inches.
2. Millimeters are given for general information only.
3. Beyond radius(r) maximum, TW shall be held for a minimum length of .011 (0.28 mm).
4. Dimension TL measured from maximum HD.
5. Outline in this zone is not controlled.
6. Dimension CD shall not vary more than .010 (0.25 mm) in zone P. This zone is controlled for automatic handling.
7. Leads at gauge plane .054 +.001, -.000 (1.37 +0.03, -0.00 mm) below seating plane shall be within .007 (0.18 mm) radius of true position (TP) at maximum material condition (MMC) relative to tab at MMC.
8. LU applies between L1 and L2. LD applies between L2 and LL minimum. Diameter is uncontrolled in L1 and beyond LL minimum.
9. All three leads.
10. Radius(r) applies to both inside corners of tab.
11. Drain is electrically connected to the case.
12. Pin out: 1- source, 2 - gate, 3 - drain (case).
13. In accordance with ASME Y14.5M, diameters are equivalent to ϕ x symbology.

FIGURE 1. Physical dimensions for TO-205 AF