

# GERMANIUM NPN TRANSISTORS

Type	$V_{CBO}$ V Max	$V_{EBO}$ V Max	$V_{CE}$ V Max		$I_{CBO}$ @ $V_{CB}$ V $\mu A$ Max	$h_{FE}$ Typical	@ $I_C$ mA	$C_{ob}$ pf Max	fab MHZ Min	Pack Outline	Power Dissipation @25°C MW	
NPN												
2N356A	30	20	20		30	5	20	100			150	
2N357	20	20	15		20	5	45	1.0	14'	6.0	100	
2N357A	30	20	20		30	5	25	200			150	
2N358	20	20	12		20	5	60	1.0	14'	9.0	100	
2N358A	30	20	15		30	5	25	300			150	
2N358A	30	20	15		30	25	25	300			150	
2N366	30	2	2		30	10	65	1.0	4.5	3.5	150	
2N377	25	15	20		25	10	40	30	20	6.0	150	
2N377A	40	15	25		40	20	20	30	20	6.0	150	
2N385	25	15	25		25	10	60	30	20	6.0	150	
2N385A	40	15	15		40	40	70	30	20	8.0	150	
2N388	20	15	20		20	10	150	30	20	15	150	
2N388	25	15	20		25	10	60	30	20	5.0	150	
2N388A	40	15	25		40	10	60	30	20	8.0	150	
2N438	30	25	25		30	10	25	1.0	9'	2.5	100	
2N438A	30	25	25		30	10	25	1.0	9'	2.5	150	
2N439	30	25	20		30	10	35	1.0	9'	5.0	100	
2N439A	30	25	20		30	10	35	1.0	9'	5.0	150	
2N440	30	25	15		30	10	65	1.0	9'	10.0	100	
2N440A	30	25	15		30	10	65	1.0	9'	10.0	150	
2N444	15		15		15	2	15	1.0	13'	0.5	100	
2N444A	40	10	25		40	5	15	1.0		0.5	150	
2N445	15		12		15	2	35	1.0	13'	2.0	100	
2N446	30	10	18		30	4	35	1.0		2.0	150	
2N446A	30	10	15		30	4	60	1.0		5.0	150	
2N447A	30	10	12		30	4	85	1.0		9.0	150	
2N587	40	40	20		40	50	20	200	30		150	
2N634	20	15	15		20	5	15	200		8.0	150	
2N534A	25	25	20		25	6	55	10	12'	8.0	150	
2N635	20	15	15		20	5	25	200		12.0	150	
2N635A	25	25	20		25	6	100	10	12'	12.0	150	
2N636	20	15	15		20	5	35	200		17.0	150	
2N636A	25	25	15		25	6	190	10	12'	17.0	150	
2N1302	25	25	25		25	6	20	10	20	3.0	150	
2N1302	25	25	25		25	6	20	10	20	3.0	150	
2N1304	25	25	20		25	6	40-200	10	20	5.0	150	
2N1304	25	25	20		25	6	40-200	10	20	5.0	150	
2N1306	25	25	15		25	6	60-300	10	20	10.0	150	
2N1306	25	25	15		25	6	60-300	10	20	10.0	150	
2N1308	25	25	15		25	6	80	10	20	15.0	150	
2N1308	25	25	15		25	6	80-400	10	20	15.0	150	
2N1605	25	12	2Y		25	5	125	20	20	4.0	150	
2N1605A	40	12			40	10	60	20	20	6.0	200	
2N1730	25	20	15		25	6	30	100	20		150	
2N1732	30	25	30		30	6	40	10	20	5.0	150	
2N1808	25	20	25		25	5	125	20	13'	14.0	150	
2N1892	30	25	15		30	6	30	2	20	5.0	150	
2N1993	30	30	15		30	10	50	10	20	3.0	150	
2N2430	32	10	32		32	10	105	50	90	1.5	280	

Type	$V_{CBO}$ V Max	$V_{EBO}$ V Max	$V_{CE}$ V Max		$I_{CBO}$ @ $V_{CB}$ V $\mu A$ Max	$h_{FE}$ Min Max	@ $I_C$ mA	$C_{ob}$ pf Max	fab MHZ Min	Pack Outline	Power Dissipation @25°C MW
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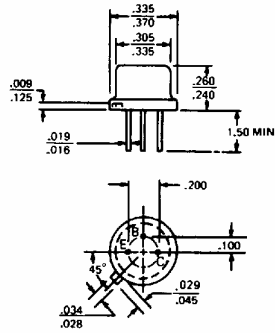
## GERMANIUM PNP MESA TRANSISTORS

2N705	15	3.5			5	3.0	25-	10		300	TO-18 <sup>1)</sup>	300
2N705A	15	3.5			5	3.0	25-	10			TO-18 <sup>1)</sup>	150
2N710	15	1.0			1	3.0	25-	10		300	TO-18 <sup>1)</sup>	300
2N711	12	1.0	12		5	3.0	20-	10	7.5	150	TO-18 <sup>1)</sup>	150
2N711A	15	1.5	7		5	1.5	25-	10	6.0	150	TO-18 <sup>1)</sup>	150
2N711B	18	2.0	7		10	1.5	30-	10	6.0	150	TO-18 <sup>1)</sup>	150
2N827	20	4.0			15	5.0	100-	10	9.0		TO-18 <sup>1)</sup>	150
2N828	18	2.5			6	3.0	25-	10		300	TO-18 <sup>1)</sup>	300

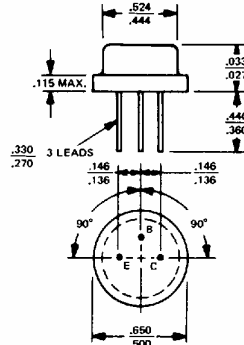
# GERMANIUM POWER TRANSISTORS

## CASE OUTLINE DRAWINGS & DIMENSIONS

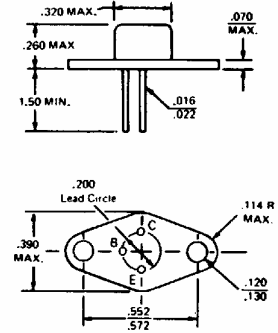
TO-5



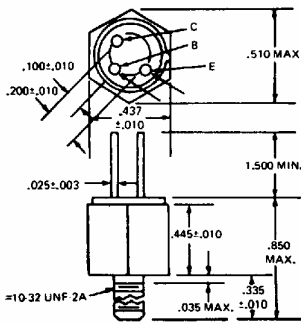
TO-8



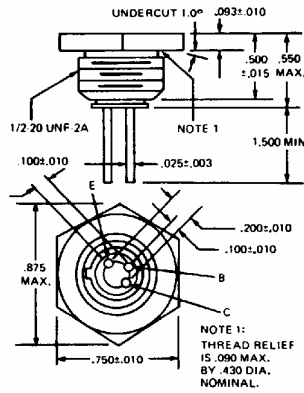
TO-37



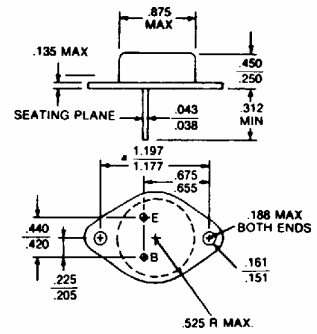
MT-27



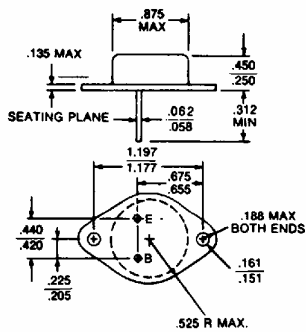
MT-28



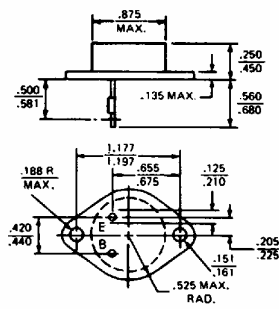
TO-3



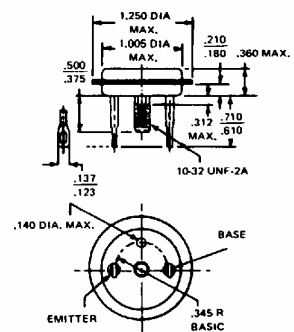
MODIFIED TO-3  
(60 mil pins)



TO-41



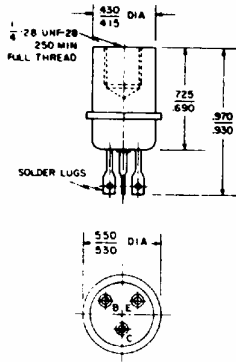
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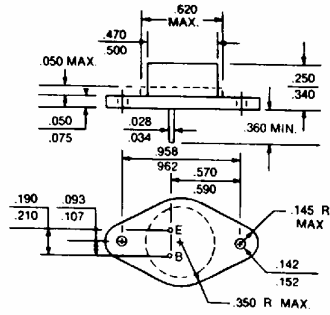
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## CASE OUTLINE DRAWINGS & DIMENSIONS

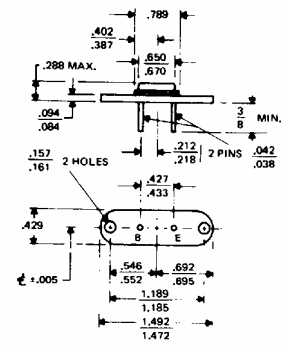
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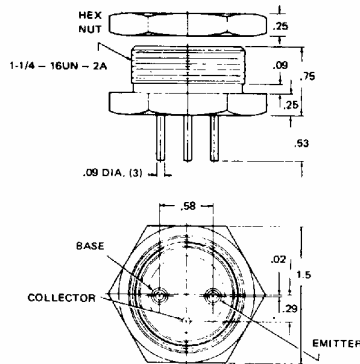
TO-66



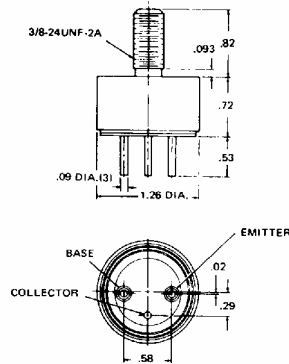
MS-7



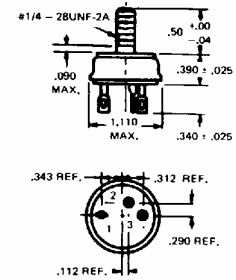
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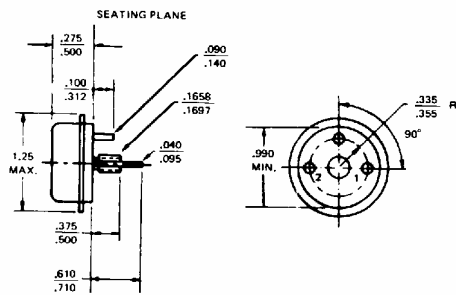
MT-23



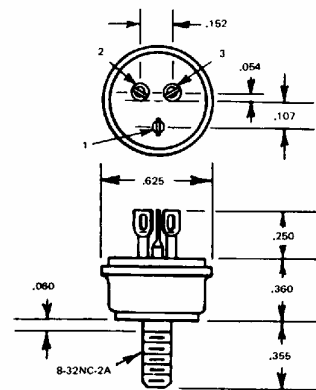
MT-7



TO-68



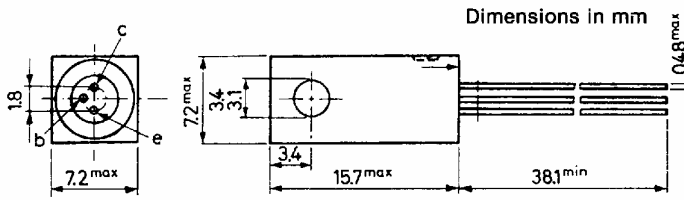
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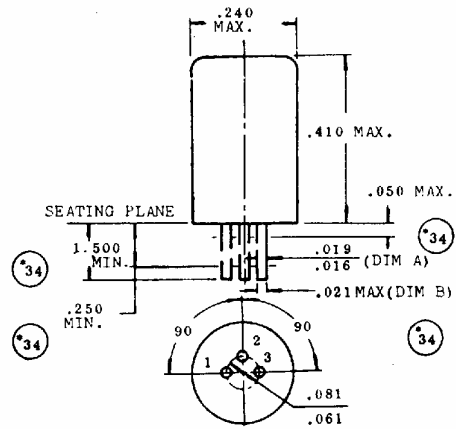
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## CASE OUTLINE DRAWINGS & DIMENSIONS

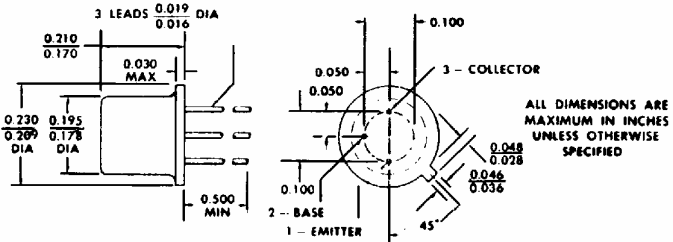
NS257



TO-1



TO-18



THE COLLECTOR IS ELECTRICAL CONTACT WITH THE CASE.

ALL JEDEC TO-18 DIMENSIONS AND NOTES ARE APPLICABLE.



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