

# GERMANIUM POWER TRANSISTORS

Type Number	Case Type	$V_{CBO}$ V	$V_{CEO}$ V	$V_{EBO}$ V	$V_{CER}$ V	$V_{CES}$ V	CURRENT GAIN				SATURATION VOLTAGES				$\theta_{J-C}$ °C/W
							Min.	$h_{FE}$	Max.	$V_{CE} @ I_C$ V	$V_{CE} @ I_C$ V	$V_{BE(s)}$ V	$V_{BE(s)}$ V	$I_C @ I_B$ A	
<b>25 AMP GERMANIUM PNP (Cont.)</b>															
2N1162A	TO-3	50	20	25.0		35	15	65	1.0	25.0	1.00		25.0	1.600	.80
2N1163	TO-41	50		25.0		35	15	65	1.0	25.0	.80		25.0	1.600	.80
2N1163A	TO-41	50	20	25.0		35	15	65	1.0	25.0	1.00		25.0	1.600	.80
2N1164	TO-3	80		40.0		60	15	65	1.0	25.0	.80		25.0	1.600	.80
2N1164A	TO-3	80	40	40.0		60	15	65	1.0	25.0	1.00		25.0	1.600	.80
2N1165	TO-41	80		40.0		60	15	65	1.0	25.0	.80		25.0	1.600	.80
2N1165A	TO-41	80	40	40.0		60	15	65	1.0	25.0	1.00		25.0	1.600	.80
2N1166	TO-3	100		50.0		75	15	65	1.0	25.0	.80		25.0	1.600	.80
2N1166A	TO-3	100	50	50.0		75	15	65	1.0	25.0	1.00		25.0	1.600	.80
2N1167	TO-41	100		50.0		75	15	65	1.0	25.0	.80		25.0	1.600	.80
2N1167A	TO-41	100	50	50.0		75	15	65	1.0	25.0	1.00		25.0	1.600	.80
2N1651	TO-41	60		1.5		60	35	140	2.0	10.0	.65	.90	25.0	2.500	.80
2N1652	TO-41	100		1.5		100	35	140	2.0	10.0	.65	.90	25.0	2.500	.80
2N1653	TO-41	120		1.5		120	35	140	2.0	10.0	.65	.90	25.0	2.500	.80
2N1751	TO-3	80		2.5		80	30	90	1.5	20.0	.50		20.0	2.500	.80
2N2285	TO-3	60	30	1.5			35	140	2.0	10.0	.65	1.50	25.0	2.500	.80
2N2286	TO-3	100	60	1.5			35	140	2.0	10.0	.65	1.50	25.0	2.500	.80
2N2287	TO-3	120	80	1.5			35	140	2.0	10.0	.65	1.50	25.0	2.500	.80
2N2636	TO-41	100	60	1.5			35	140	2.0	10.0	.65	.90	25.0	2.500	.80
2N2637	TO-41	100	60	1.5			35	140	2.0	10.0	.65	.90	25.0	2.500	.80
2N2638	TO-41	100	60	1.5			35	140	2.0	10.0	.65	.90	25.0	2.500	.80
2N2691	TO-41	100	80	1.5			30	100	1.5	20.0	.65	.90	25.0	2.500	.80
2N2691A	TO-41	120	80	1.5			50	100	1.5	20.0	.65	.90	25.0	2.500	.50
SDG600	TO-3	75	50	1.5			50		2.0	5.0	.75	1.40	25.0		1.00
SDG601	TO-3	75	60	1.5			50		2.0	5.0	.75	1.40	25.0		1.00
SDG602	TO-3	75	70	1.5			50		2.0	5.0	.75	1.40	25.0		1.00
SDG603	TO-3	90	80	1.5			50		2.0	5.0	.75	1.40	25.0		1.00

## 30 AMP GERMANIUM PNP

2N2152	TO-36	45	40	25.0		45	25		2.0	15.0	.30	2.00	25.0	2.000	.50
2N2153	TO-36	60	45	30.0		60	25		2.0	15.0	.30	2.00	25.0	2.000	.50
2N2154	TO-36	75	60	40.0		75	25		2.0	15.0	.30	2.00	25.0	2.000	.50
2N2156	TO-36	45	30	25.0		45	40		2.0	15.0	.30	2.00	25.0	2.000	.50
2N2157	TO-36	60	45	30.0		60	40		2.0	15.0	.30	2.00	25.0	2.000	.50
2N2158	TO-36	75	60	40.0		75	40		2.0	15.0	.30	2.00	25.0	2.000	.50

## 35 AMP GERMANIUM PNP

2N1520	TO-36	50	40	30.0			17	68	2.0	15.0	.60		35.0	4.000	.50
2N1521	TO-36	80	60				17	68	2.0	15.0	.60		35.0	4.000	.50

## 40 AMP GERMANIUM PNP

2N1157	MT-7	60	45				10		2.0	40.0	.80		40.0	6.000	
2N1157A	MT-7	80	50				10		2.0	40.0	.80		40.0	6.000	

## 50 AMP GERMANIUM PNP

2N1522	TO-36	50	40	30.0			25	100	2.0	15.0	.50		50.0	5.000	.50
2N1523	TO-36	80	60	30.0			25	100	2.0	5.0	.50		50.0	5.000	.50
2N2357*	TO-41	60	30	2.5		60	30	90	1.5	20.0	.90	1.50	50.0	5.000	.50
2N2358*	TO-41	100	60	2.5		100	30	90	1.5	20.0	.90	1.50	50.0	5.000	.50
2N2359*	TO-41	120	80	2.5		120	30	90	1.5	20.0	.90	1.50	50.0	5.000	.50
SDG604	TO-3	30	20	1.5			30	90	2.0	20.0	.90	1.50	50.0	5.000	.50
SDG605	TO-3	45	30	1.5			30	90	2.0	20.0	.90	1.50	50.0	5.000	.50
SDG606	TO-3	60	45	1.5			30	90	2.0	20.0	.90	1.50	50.0	5.000	.50
SDG607	TO-3	75	60	1.5			30	90	2.0	20.0	.90	1.50	50.0	5.000	.50

\* $t_{on}$  15  $\mu$ s;  $t_{off}$  10  $\mu$ s; @  $V_{CE}$  28V;  $I_C$  50A

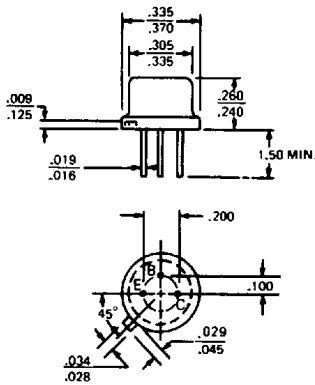
## 60 AMP GERMANIUM PNP

2N4048	TO-68	45	30	25.0		45	15		2.0	60.0	.30	1.00	60.0	6.000	.50
2N4049	TO-68	60	45	30.0		60	15		2.0	60.0	.30	1.00	60.0	6.000	.50
2N4050	TO-68	75	60	40.0		75	15		2.0	60.0	.30	1.00	60.0	6.000	.50
2N4051	TO-68	45	30	25.0		45	15		2.0	60.0	.30	1.00	60.0	6.000	.50
2N4052	TO-68	60	45	30.0		60	15		2.0	60.0	.30	1.00	60.0	6.000	.50
2N4053	TO-68	75	60	40.0		75	15		2.0	60.0	.30	1.00	60.0	6.000	.50
SDT1808	TO-68	80	60				15		2.0	50.0	.45	1.25	50.0	5.000	.50
SDT1809	TO-68	60	45				15		2.0	50.0	.45	1.25	50.0	5.000	.50
SDT1810	TO-68	40	30				15		2.0	50.0	.45	1.25	50.0	5.000	.50
SDT1908	MT-23	80	60				15		2.0	50.0	.45	1.25	50.0	5.000	.60

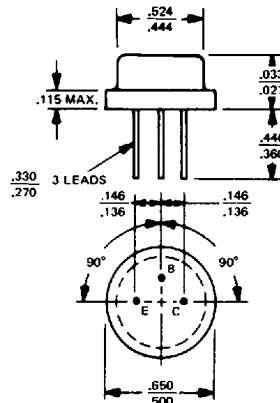
# GERMANIUM POWER TRANSISTORS

## CASE OUTLINE DRAWINGS & DIMENSIONS

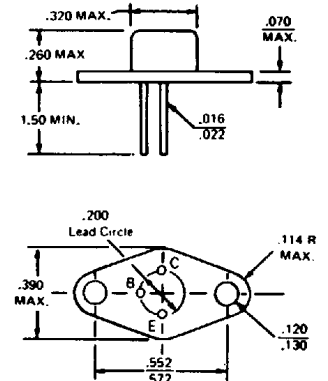
TO-5



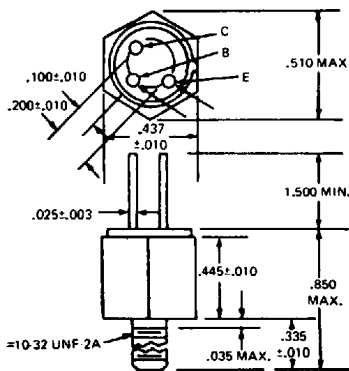
TO-8



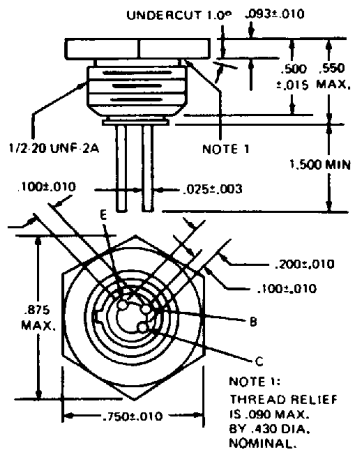
TO-37



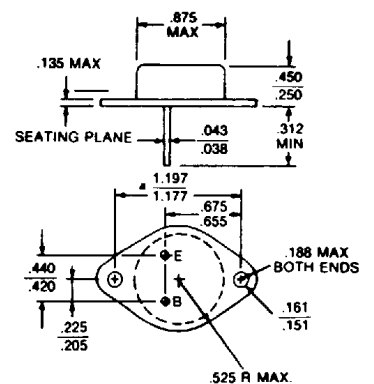
MT-27



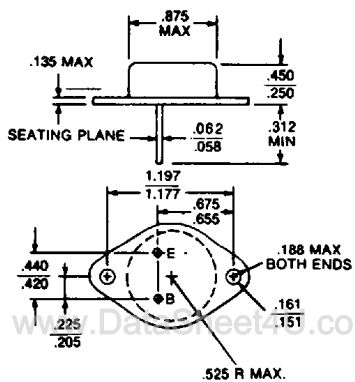
MT-28



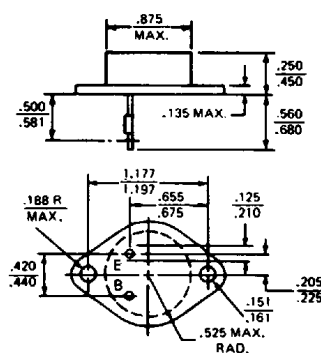
TO-3



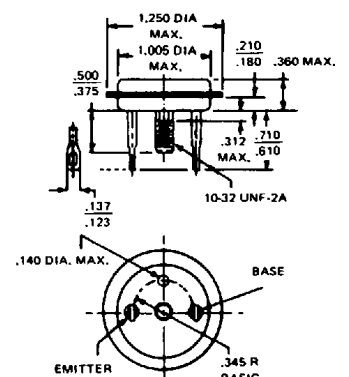
MODIFIED TO-3  
(60 mil pins)



TO-41



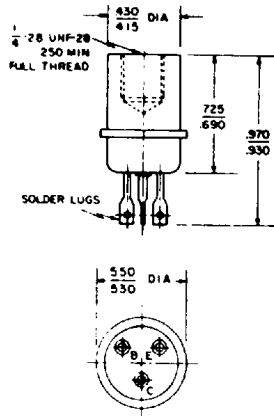
TO-36



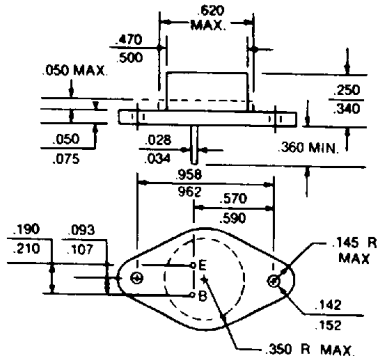
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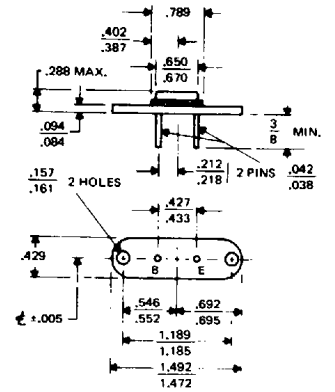
TO-13



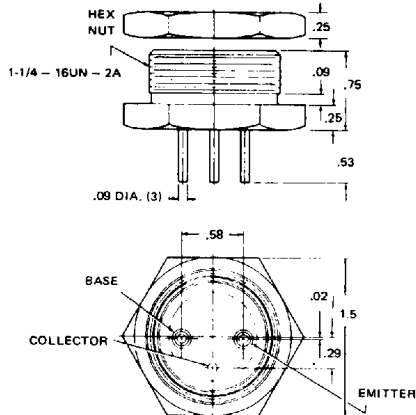
TO-66



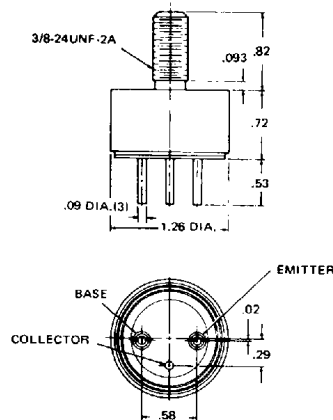
MS-7



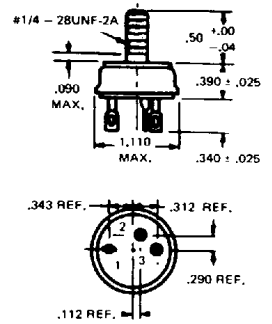
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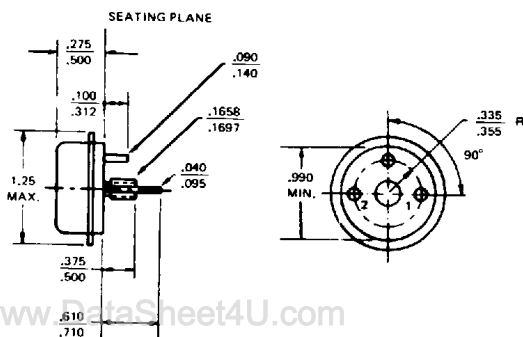
MT-23



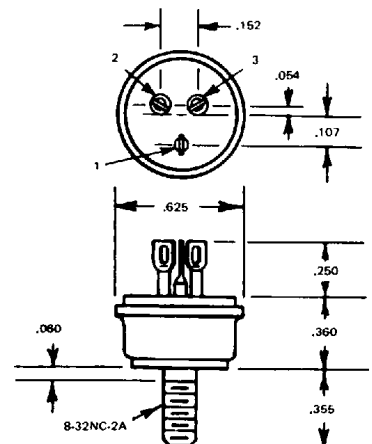
MT-7



TO-68



MT-36

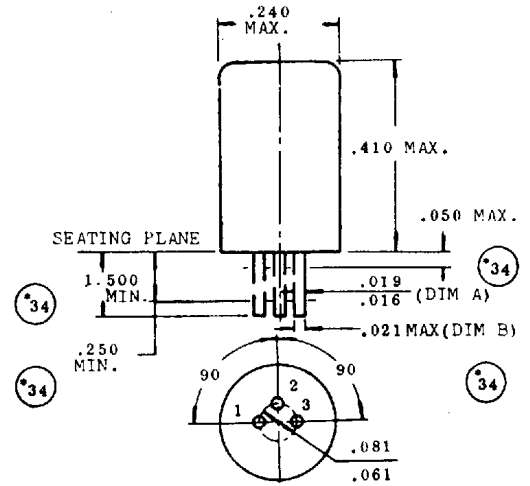
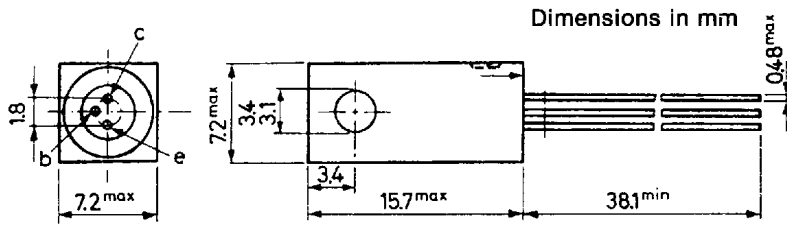


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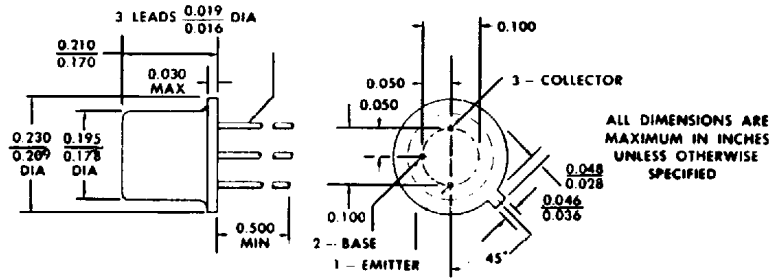
## CASE OUTLINE DRAWINGS & DIMENSIONS

NS257

TO-1



TO-18



THE COLLECTOR IS ELECTRICAL  
CONTACT WITH THE CASE.

ALL JEDEC TO-18 DIMENSIONS  
AND NOTES ARE APPLICABLE.