

2N3375/2N3632/2N3733

ABSOLUTE MAXIMUM RATINGS ($T_{\text{case}} = 25^{\circ}\text{C}$)

Symbol	Parameter	2N3375	2N3632	2N3733	Unit
V_{CBO}	Collector to Base Voltage	65	65	65	V
V_{CEO}	Collector to Emitter Voltage	40	40	40	V
V_{EBO}	Emitter to Base Voltage	4.0	4.0	4.0	V
$I_{\text{C(max)}}$	Continuous Collector Current	1.5	3.0	3.0	A
P_{D}	Total Dissipation at 25°C Stud	11.6	23.0	23.0	V
T_{j}	Junction Temperature	200	200	200	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	- 65 to 150	- 65 to 150	- 65 to 150	$^{\circ}\text{C}$

		2N3375	2N3632	2N3733	
$R_{\text{th(j-c)}}$	Junction-case Thermal Resistance	15.0	7.6	7.6	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_{\text{case}} = 25^{\circ}\text{C}$)

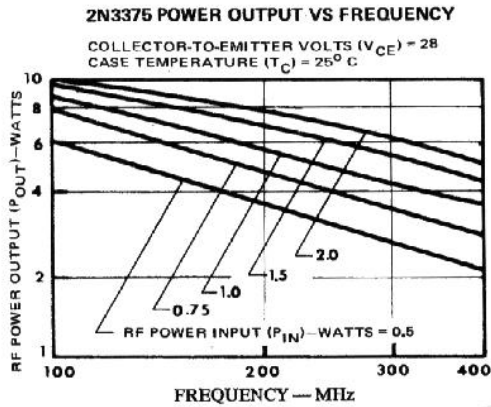
STATIC

Symbol	Test Conditions	2N3375			2N3632			2N3733			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
BV_{CBO}	$I_{\text{C}} = 0.5\text{mA}$ $V_{\text{BE}} = 0$	65			65			65			V
BV_{CEO}	$I_{\text{C}} = 200\text{mA}$ $I_{\text{B}} = 0$	40			40			40			V
BV_{EBO}	$I_{\text{E}} = 0.25\text{mA}$ $I_{\text{C}} = 0$	4		($I_{\text{E}} = 0.1\text{mA}$)	4			4			V
I_{CEO}	$V_{\text{CB}} = 30\text{V}$ $I_{\text{E}} = 0$			0.1			0.25		0.25		mA
H_{FE}	$V_{\text{CE}} = 5\text{V}$ $I_{\text{C}} = 250\text{mA}$	10			5	($I_{\text{C}} = 1\text{A}$)		10			

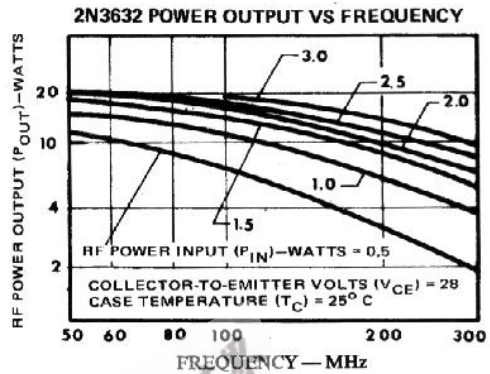
DYNAMIC

Symbol	Test Conditions	2N3375			2N3632			2N3733			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
P_{O}	$F = 175\text{MHz}$ $V_{\text{CE}} = 28\text{V}$ Class C				13.5						W
P_{O}	$F = 400\text{MHz}$ $V_{\text{CC}} = 28\text{V}$	3						10			W
G_{P}	$F = 175\text{MHz}$ $V_{\text{CC}} = 28\text{V}$				5.8						dB
G_{P}	$F = 400\text{MHz}$ $V_{\text{CC}} = 28\text{V}$	4.8						4.0			dB
η_{C}	$F = 175\text{MHz}$ $V_{\text{CC}} = 28\text{V}$				70						%
η_{C}	$F = 400\text{MHz}$ $V_{\text{CC}} = 28\text{V}$	40						45			%
C_{OB}	$F = 1\text{MHz}$ $V_{\text{CB}} = 30\text{V}$			10			20			20	pF

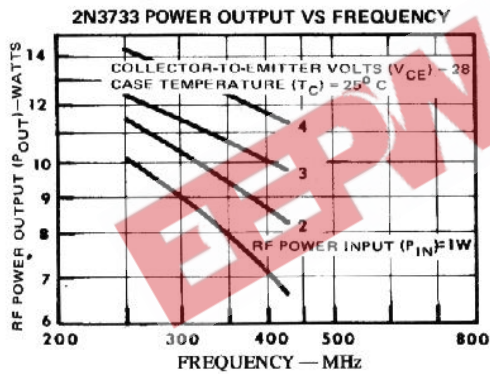
APPLICATION INFORMATION (typical curves)



S882N3375-02



S882N3632-04

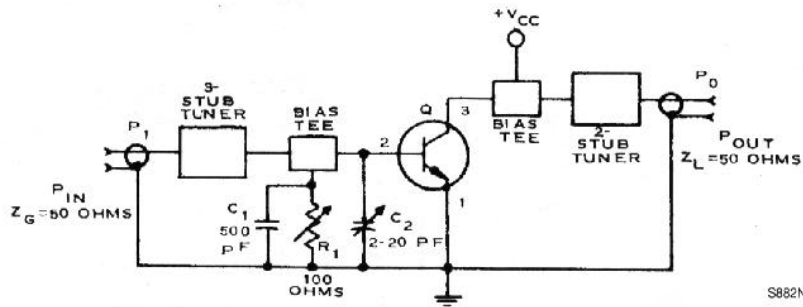


S882N3733-05

2N3375/2N3632/2N3733

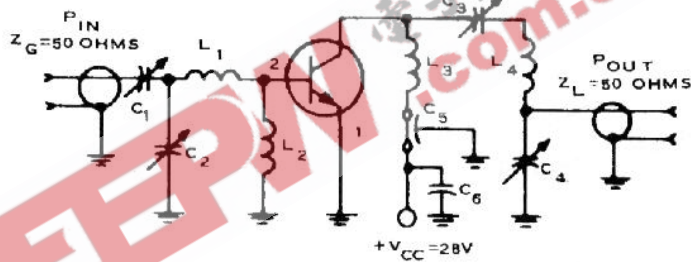
TEST CIRCUITS

2N3375 (400 MHz OPERATION)



S882N3375-02

2N3632 (175MHz OPERATION)

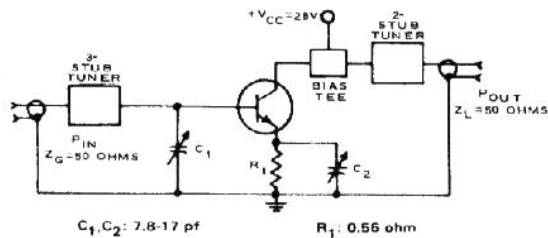


S882N3632-02

2N3632

- C₁, C₂, C₃, C₄: 7 - 100pF
- C₅: 100pF
- C₆: 0.01F, disc ceramic
- L₁: 1.5 turns No. 16 wire, 3/16" ID, 5/16" long
- L₂: Ferrite choke, Z = 450
- L₃: 1 turn No. 16 wire, 1/4" ID, 3/8" long
- L₄: 2 turns No. 16 wire, 1/4" ID, 1/4" long

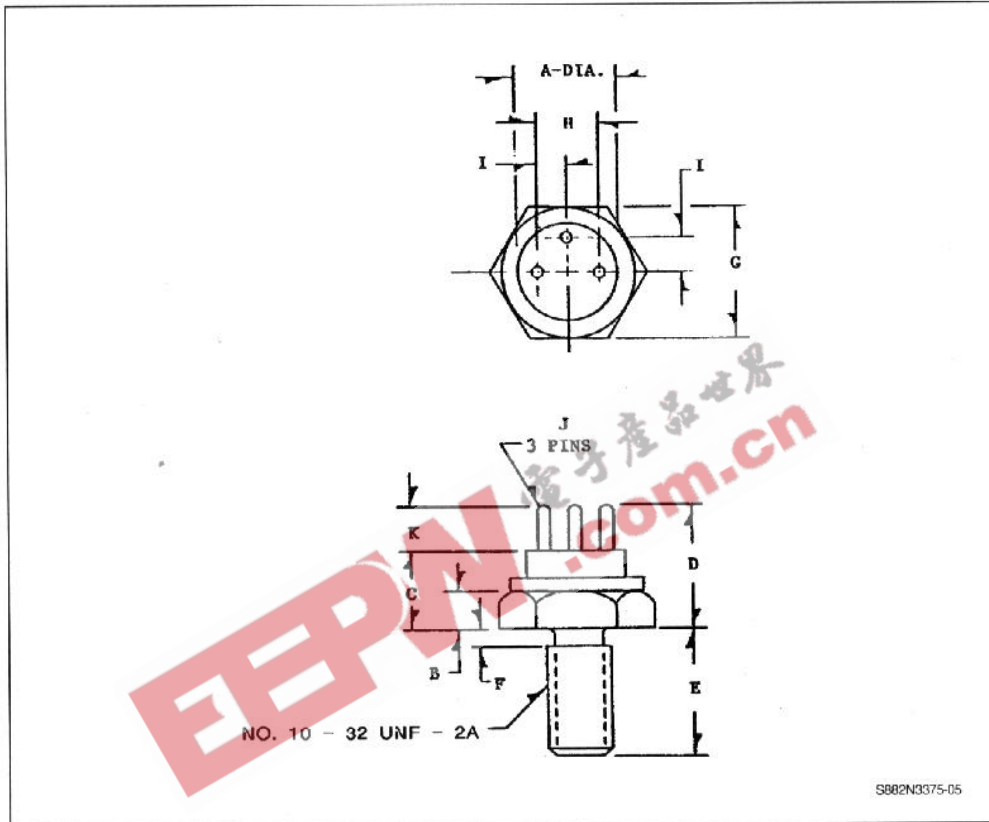
2N3733(400MHz OPERATION)



S882N3733-02

PACKAGE MECHANICAL DATA

TO 60



	Minimum Inches	Maximum Inches
A	.320	.340
B	.110	.135
C	.245	.300
D	.400	.450
E	.420	.455
E	.140	.160

	Minimum Inches	Maximum Inches
F		.078
G	.420	.440
H	.190	.210
I	.095	.105
J	.030	.046
K	.140	.160