

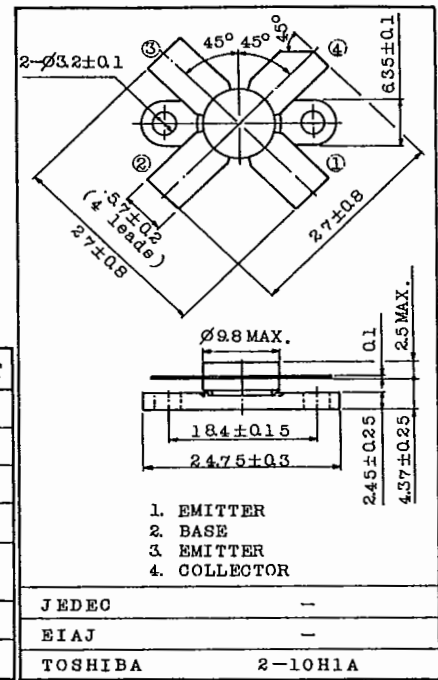
VHF BAND POWER AMPLIFIER APPLICATIONS.

**FEATURES :**

- . Output Power :  $P_o=40W$  (Min.)  
 (  $f=175MHz$ ,  $V_{CC}=13.5V$ ,  $P_i=10W$  )
- . 100% Tested for Load Mismatch Stress at All Phase Angles with 30:1 VSWR @  $V_{CC}=13.5V$ ,  $P_i=10W$ ,  $f=175MHz$

**MAXIMUM RATINGS (Ta=25°C)**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	35	V
Collector-Emitter Voltage	$V_{CEO}$	18	V
Emitter-Base Voltage	$V_{EBO}$	3.5	V
Collector Current	$I_C$	10	A
Collector Power Dissipation (Tc=25°C)	$P_C$	70	W
Junction Temperature	$T_j$	175	°C
Storage Temperature Range	$T_{stg}$	-65 ~ 175	°C



Weight : 4.0g

**ELECTRICAL CHARACTERISTICS (Ta=25°C)**

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=15V$ , $I_E=0$	-	-	2	mA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=20mA$ , $I_E=0$	35	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50mA$ , $I_B=0$	18	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=1mA$ , $I_C=0$	3.5	-	-	V
DC Current Gain	$h_{FE}$	$V_{CE}=5V$ , $I_C=5A$	10	-	-	
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V$ , $I_E=0$ , $f=1MHz$	-	-	160	pF
Output Power	$P_o$	(Fig.)	40	44	-	W
Power Gain	$G_{pe}$	$V_{CC}=13.5V$ , $f=175MHz$ ,	6.0	6.4	-	dB
Collector Efficiency	$\eta_c$	$P_i=10W$	60	73	-	%
Series Equivalent Input Impedance	$Z_{in}$	$V_{CC}=13.5V$ , $f=175MHz$ ,	-	0.95 -j0.1	-	$\Omega$
Series Equivalent Output Impedance	$Z_{OUT}$	$P_o=40W$	-	2.6 -j0.15	-	$\Omega$

Note : Above parameters , ratings , limits and conditions are subject to change.