NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI 2SC1972** is Designed for RF power amplifiers on VHF band mobile radio applications.

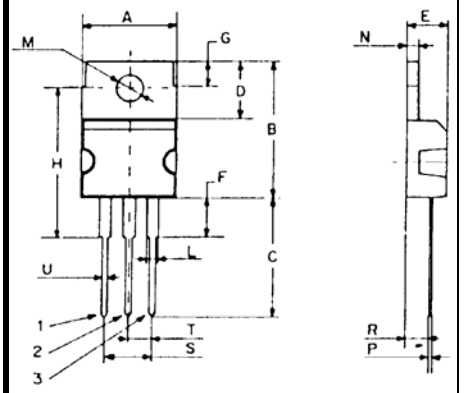
FEATURES INCLUDE:

- Replaces Original **2SC1972** in Most Applications
- High Gain Reduces Drive Requirements
- Economical **TO-220CE** Package

MAXIMUM RATINGS

I_C	3.5 A
V_{CBO}	35 V
P_{DISS}	25 W @ T_C = 25 °C
T_{STG}	-55 °C to +175 °C
θ_{JC}	6.0 °C/W

PACKAGE STYLE TO-220AB (COMMON EMITTER)



1 = BASE 2 = EMITTER
3 = COLLECTOR TAB = EMITTER

	DIMENSIONS			
	mm		inches	
	min	max	min	max
A	10	10.4	0.393	0.409
B	15.2	15.9	0.598	0.626
C	12.7	13.7	0.500	0.539
D	6.2	6.6	0.244	0.260
E	4.4	4.6	0.173	0.181
F	3.5	5.5	0.137	0.216
G	2.65	2.95	0.104	0.116
H	17.6 typ.		0.692 typ.	
L	1.14	1.7	0.044	0.067
M	3.75	3.85	0.147	0.151
N	1.23	1.32	0.048	0.051
P	0.41	0.64	0.016	0.025
R	2.4	2.72	0.094	0.107
S	4.95	5.15	0.194	0.203
T	2.4	2.7	0.094	0.106
U	0.61	0.94	0.024	0.037

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	I_C = 50 mA	17			V
BV_{CBO}	I_C = 10 mA	35			V
BV_{EBO}	I_E = 10 mA	4.0			V
I_{CBO}	V_{CES} = 25 V			100	µA
I_{EBO}	V_{EB} = 3.0 V			500	µA
h_{FE}	V_{CE} = 10 V I_C = 100 mA	10	50	180	---
η_C P_{OUT}	V_{CC} = 13.5 V P_{IN} = 2.5 W f =175 MHz	60 14	70 15		% W