

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **MSC72166** is Designed for High Power Pulsed IFF Avionics Applications.

MAXIMUM RATINGS

I_C	40 A
V_{CC}	50 V
P_{DISS}	1350 W @ T _C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	0.06 °C/W

PACKAGE STYLE .400X.500 COMMON BASE

	MINIMUM Inches/mm	MAXIMUM Inches/mm
A	.145/3.68	.155/3.93
B	.750/19.05	
C	.380/9.65	.390/9.91
D	.130/3.30	
E	.495/12.57	.507/12.88
F	.640/16.26	.655/16.64
G	.890/22.61	.910/23.11
H	.002/0.05	.006/0.15
I	.055/1.40	.065/1.65
J	.110/2.92	.135/3.43
K		.230/5.84
L	.395/10.03	.407/10.34

1 = COLLECTOR 2 & 4 = BASE
3 = EMITTER

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	I _C = 150 mA	40			V
BV_{CBO}	I _C = 25 mA	65			V
I_{CES}	V _{CE} = 50 V			35	mA
I_{EBO}	V _{EB} = 3.5 V			10	mA
h_{FE}	V _{CE} = 5.0 V I _C = 1.0 A	5.0		200	---
P_{out} G_P	V _{CC} = 50 V P _{in} = 130 W f = 1030 MHz	630 6.5			W dB