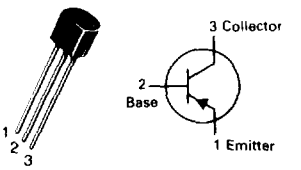
- Designed for UHF/VHF Amplifier Applications
- High Current Bandwidth Product
  f_T = 2000 MHz @ 10 mAdc

MPSH69★

CASE 29-04, STYLE 1
TO-92 (TO-226AA)



RF AMPLIFIER TRANSISTOR

PNP SILICON

★This is a Motorola designated preferred device.

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	−15	Vdc
Collector-Base Voltage	V_{CBO}	−15	Vdc
Emitter-Base Voltage	V_{EBO}	−4	Vdc
Total Device Dissipation @ T_A = 25°C Derate above 25°C	P_D	350 2.81	mW mW/°C
Operating and Storage Junction Temperature Range	T_J, T_{stg}	−55 to +150	°C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	357	°C/W

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted.)

Characteristic	Symbol	Min	Typ	Max	Unit
OFF CHARACTERISTICS					
Collector-Emitter Breakdown Voltage (I_C = −1.0 mAdc, I_B = 0)	$V_{(BR)CEO}$	−15	—	—	Vdc
Collector-Base Breakdown Voltage (I_C = −10 μAdc, I_E = 0)	$V_{(BR)CBO}$	−15	—	—	Vdc
Emitter-Base Breakdown Voltage (I_E = −10 μAdc, I_C = 0)	$V_{(BR)EBO}$	−4	—	—	Vdc
Collector Cutoff Current (V_{CB} = −10 Vdc, I_E = 0)	I_{CBO}	—	—	−100	nAdc
ON CHARACTERISTICS					
DC Current Gain (I_C = −10 mAdc, V_{CE} = −10 Vdc)	h_{FE}	30	—	300	—
SMALL-SIGNAL CHARACTERISTICS					
Current-Gain — Bandwidth Product (I_C = −10 mAdc, V_{CE} = −10 Vdc, f = 100 MHz)	f_T	2000	—	—	MHz
Collector-Base Capacitance (V_{CE} = −10 Vdc, I_E = 0, f = 1.0 MHz)	C_{rb}	—	—	0.3	pF