

DESCRIPTION

MPS3569 is NPN silicon planar epitaxial transistor designed for AF medium power amplifiers.

TO-92A



EBC

ABSOLUTE MAXIMUM RATINGS

Collector-Base Voltage	V_{CBO}	80V
Collector-Emitter Voltage	V_{CEO}	40V
Emitter-Base Voltage	V_{EBO}	5V
Collector Current	I_C	1A
Continuous Power Dissipation	P_d	625mW
Operating & Storage Junction Temperature	T_j, T_{stg}	-55 to +150°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	MIN	MAX	UNIT	TEST CONDITIONS
Collector-Base Breakdown Voltage	BV_{CBO}	80		V	$I_C=100\mu A$ $I_E=0$
Collector-Emitter Sustaining Voltage	$V_{CEO(sust)}^*$	40		V	$I_C=30mA$ $I_B=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	5		V	$I_E=10\mu A$ $I_C=0$
Collector Cutoff Current	I_{CBO}		50	nA	$V_{CB}=40V$ $I_E=0$
Collector Cutoff Current	I_{CBO}		5	μA	$V_{CB}=40V$ $I_E=0$ $T_A=75^\circ C$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		0.25	V	$I_C=150mA$ $I_B=15mA$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		1.1	V	$I_C=150mA$ $I_B=15mA$
D.C. Current Gain	h_{FE}^*	100	300		$V_{CE}=1V$ $I_C=150mA$

M P S 3 5 6 9

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
D.C. Current Gain	h_{FE}^*	100				$V_{CE}=1V$ $I_C=30mA$
High Frequency Current Gain	h_{fe}	3				$V_{CE}=10V$ $I_C=50mA$ $f=20Mc$
Output Capacitance	C_{ob}		18	20	pF	$V_{CB}=10V$ $I_E=0$
Input Capacitance	C_{ib}		44	80	pF	$V_{EB}=0.5V$ $I_C=0$

* Pulse Conditions : Length=300uS, duty cycle=1%