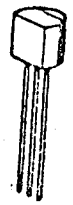
MICRO ELECTRONICS

SILICON
TRANSISTOR

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=100uA I_E=0
Collector-Emitter Sustaining Voltage	$V_{CEO(sust)}$*	40		V	I_C=30mA I I_B=0
Emitter-Base Breakdown Voltage	BV_{EBO}	5		V	I_E=10uA I_C=0
Collector Cutoff Current	I_{CBO}		50	nA	V_{CB}=40V I_E=0
Collector Cutoff Current	I_{CBO}		5	uA	V_{CB}=40V I_E=0 T_A=75°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

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MPS 3569

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	Cob		18	20	pF	V_{CB}=10V I_E=0
Input Capacitance	Cib		44	80	pF	V_{EB}=0.5V I_C=0

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