

# MICRO ELECTRONICS

## PN3568

NPN

SILICON  
TRANSISTOR

PN3568 is NPN silicon planar epitaxial transistor designed for amplifier and switching applications for collector current up to 500mA.

TO-92



EBC

### ABSOLUTE MAXIMUM RATINGS

Collector-Base Voltage	V <sub>CB0</sub>	80V
Collector-Emitter Voltage	V <sub>CE0</sub>	60V
Emitter-Base Voltage	V <sub>EB0</sub>	5V
Collector Current	I <sub>C</sub>	500mA
Total Power Dissipation	P <sub>tot</sub>	600mW
Operating Junction & Storage Temperature	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150°C

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)

PARAMETER	SYMBOL	MIN	MAX	UNIT	TEST CONDITIONS
Collector-Base Breakdown Voltage	BV <sub>CB0</sub>	80		V	I <sub>C</sub> =100μA I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	LV <sub>CE0</sub>	60		V	I <sub>C</sub> =10mA I <sub>B</sub> =0*
Emitter-Base Breakdown Voltage	BV <sub>EB0</sub>	5		V	I <sub>E</sub> =10μA I <sub>C</sub> =0
Collector Cutoff Current	I <sub>CB0</sub>		50	nA	V <sub>CB</sub> =40V I <sub>E</sub> =0
D.C. Current Gain	HFE	40			I <sub>C</sub> =30mA V <sub>CE</sub> =1V*
		40	120		I <sub>C</sub> =150mA V <sub>CE</sub> =1V*
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>		0.25	V	I <sub>C</sub> =150mA I <sub>B</sub> =15mA*
Output Capacitance	C <sub>ob</sub>		20	pF	V <sub>CB</sub> =10V f=1MHz
Current Gain-Bandwidth Product	f <sub>T</sub>	60	600	MHz	I <sub>C</sub> =50mA V <sub>CE</sub> =1V

\* Pulse Test : Pulse Width = 300μS, Duty Cycle = 2%.

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