

MICRO ELECTRONICS

PN3641
PN3642
PN3643

NPN

SILICON TRANSISTORS

PN3641, PN3642 & PN3643 are NPN silicon planar transistors designed for small signal general purpose amplifiers and switches.

TO-92A



ABSOLUTE MAXIMUM RATINGS

		PN3641	PN3642	PN3643
Collector-Base Voltage	VCBO	60V	60V	60V
Collector-Emitter Voltage	VCEO	30V	45V	30V
Emitter-Base Voltage	VEBO		5V	
Collector Current	IC		500mA	
Total Power Dissipation	Ptot		600mW	
Operating Junction & Storage Temperature	Tj, Tstg		-55 to +150°C	

ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	MIN	MAX	UNIT	TEST CONDITIONS
Collector-Base Breakdown Voltage	BVCBO	60		V	IC=100μA IE=0
Collector-Emitter Breakdown Voltage	LVCEO	30		V	IC=10mA IB=0
		45		V	
Emitter-Base Breakdown Voltage	BVEBO	5		V	IE=10μA IC=0
D.C. Current Gain	HFE	15			IC=500mA VCE=10V*
		20			
		40	120		
100	300				
Collector-Emitter Saturation Voltage	VCE(sat)		0.22	V	IC=150mA IB=15mA*
Output Capacitance	Cob		8	pF	VCB=10V f=1MHz
Current Gain-Bandwidth Product	fT	250		MHz	IC=50mA VCE=10V

* Pulse Test : Pulse Width = 300μS, Duty Cycle = 1%.

