

Discrete Transistors

PNP Signal Transistor Selector Guide

Type	I _C (Max.) mA	V _{(BR)CEO} (Min.) V	Beta Range h _{FE}	Package
2N6076	-100	-25	100-500	TO-98
2N4126	-200	-25	120-360	TO-92
2N4125	-200	-30	50-150	TO-92
2N3905	-200	-40	50-150	TO-92
2N3906	-200	-40	100-300	TO-92
• MPS-A63	-300	-30	5K Typ.	TO-92
• MPS-A64	-300	-30	10K Typ.	TO-92
• MPS-A65	-300	-30	20K Min.	TO-92
2N5365	-300	-40	40-120	TO-98
2N5366	-300	-40	100-300	TO-98
MPS3638	-350	-25	30 Min.	TO-92
MPS3638A	-350	-25	100 Min.	TO-92
GES2906	-350	-40	40-120	TO-92
GES2907	-350	-40	100-300	TO-92
MPS2906	-350	-40	40-120	TO-92
MPS2907	-350	-40	100-300	TO-92
GES2906A	-350	-60	40-120	TO-92
MPS2906A	-350	-60	40-120	TO-92
GES2907A	-350	-60	100-300	TO-92

• Darlington Types

PNP Signal Transistor Selector Guide

Type	I _C (Max.) mA	V _{(BR)CEO} (Min.) V	Beta Range h _{FE}	Package
MPS2907A	-350	-60	100-300	TO-92
• MPS-A55	-500	-60	50 Min.	TO-92
MPS-A56	-500	-80	50 Min.	TO-92
MPS-A93	-500	-200	30-150	TO-92
MPS-A92	-500	-300	30 Min.	TO-92
2N4402	-600	-40	50-150	TO-92
2N4403	-600	-40	100-300	TO-92
GES2904	-600	-40	40-120	TO-92
GES2905	-600	-40	100-300	TO-92
MPS6534	-600	-40	40-120	TO-92
GES2904A	-600	-60	40-120	TO-92
GES2905A	-600	-60	100-300	TO-92
MPS-L51	-600	-100	40-250	TO-92
GES5401	-600	-150	60-240	TO-92
GES5811	-750	-25	60-200	TO-92
GES5813	-750	-25	150-500	TO-92
GES5815	-750	-40	60-160	TO-92
GES5817	-750	-40	100-200	TO-92
GES5919	-750	-40	150-300	TO-92

Unijunction Transistors and Switches

Silicon Unijunction Transistors (UJTs) are intended for general-purpose industrial applications where circuit economy is of primary importance. UJT applications include use as:

SCR triggers, relaxation oscillators, timers, sawtooth generators, frequency dividers and stable voltage-sensing circuits.

Silicon Unilateral Switches (SUSs) are silicon planar, monolithic ICs having thyristor electrical characteristics closely approximating those of "ideal" four-layer diodes. These devices are designed to switch at 8 volts with a 0.02%/°C temperature coefficient. A gate lead is provided to eliminate rate effect, obtain triggering at lower voltages and to obtain transient-free waveforms.

Silicon Bilateral Switches (SBSs) are silicon planar, monolithic ICs having the electrical characteristics of a bilateral thyristor.

Designed to switch at 8 volts with a 0.02%/°C temperature coefficient, they have characteristics which are excellently matched in both directions. A gate lead is provided to eliminate rate-effect and is used to obtain triggering at lower voltages. The SBS is ideally suited for half-wave and full-wave triggering in low-voltage SCR and Triac phase-control circuits.

Programmable Unijunction Transistors (PUTs) are three-terminal, planar passivated p-n-p devices. These devices allow the designer to select R₁ and R₂ to program unijunction characteristics such as η, R_{SS}, I_p, and I_v to meet their particular needs. PUTs feature low leakage and peak point current together with low forward voltage. Typical applications included SCR triggering, pulse and timing circuits, oscillators, sensing circuits and sweep circuits.

Type	Structure	I _F (Max.) mA	V _R (Min.) V	V _S or n	Package
2N4870	UJT	50	30	0.56-0.75	TO-92
2N4871	UJT	50	30	0.7-0.85	TO-92
GES2646	UJT	50	30	0.56-0.75	TO-92
GES2647	UJT	50	30	0.68-0.82	TO-92
GET4870	UJT	50	30	0.56-0.75	TO-18
GET4871	UJT	50	30	0.7-0.85	TO-18
2N2646	UJT	500	30	0.56-0.75	TO-18
2N2647	UJT	500	30	0.68-0.82	TO-18
2N4987	SUS	175	30	6.0-10.0	TO-98
2N4990	SUS	175	30	7.0-9.0	TO-98
2N4988	SUS	175	30	7.5-9.0	TO-98
2N4989	SUS	175	30	7.5-8.2	TO-98
2N6027	PUT	150	40	0.2-1.6	TO-98
2N6028	PUT	150	40	0.2-0.6	TO-98
GES6027	PUT	150	40	0.2-1.6	TO-92
GES6028	PUT	150	40	0.2-0.6	TO-92
2N4991	SBS	175	-	6.0-10.0	TO-98
2N4992	SBS	175	-	7.5-9.0	TO-98