TABLE 6.26 Schematic Symbols Used in Electronics

Component	Symbol
Ammeter	——————
Amplifier general	
Amplifier, inverting	
Amplifier, operational	=>-
AND gate	=
Antenna, balanced	
Antenna, general	Ψ
Antenna, loop	
Antenna, loop, multiturn	
Battery	<u></u> -             <del> </del>
Capacitor, feedthrough	$\dashv \mid \vdash$
Capacitor, fixed	
Capacitor, variable	**
Capacitor, variable, split-rotor	
Capacitor, variable, split-stator	

TABLE 6.26 Schematic Symbols Used in Electronics (Continued)

Component	Symbol
Cathode, electron-tube, cold	
Cathode, electron-tube, directly heated	$\bigcap$
Cathode, electron-tube indirectly heated	
Cavity resonator	• •
Cell, electrochemical	<del> </del>
Circuit breaker	<b>→</b>
Coaxial cable	
Crystal, piezoelectric	$\dashv \Box \vdash$
Delay line	
Diac	
Diode, field-effect	<b>—</b>
Diode, general	<del></del>
Diode, Gunn	<b>→</b>
Diode, light-emitting	——————————————————————————————————————
Diode, photosensitive	<del></del>

TABLE 6.26 Schematic Symbols Used in Electronics (Continued)

Component	Symbol
Diode, PIN	
Diode, Schottky	<del></del>
Diode, tunnel	<del>-</del>
Diode, varactor	
Diode, zener	<del></del>
Directional coupler	<del></del>
Directional wattmeter	
Exclusive-OR gate	
Female contact, general	$\overline{}$
Ferrite bead	
Filament, electron-tube	$\bigcap$
Fuse	<b>_</b>
Galvanometer	
Grid, electron-tube	
Ground, chassis	

TABLE 6.26 Schematic Symbols Used in Electronics (Continued)

Component	Symbol
Ground, earth	<u>_</u>
Handset	
Headset, double	-6-
Headset, single	
Headset, stereo	
Inductor, air core	
Inductor, air core, bifilar	
Inductor, air core, tapped	
Inductor, air core, variable	
Inductor, iron core	
Inductor, iron core, bifilar	
Inductor, iron core, tapped	
Inductor iron core, variable	
Inductor, powdered-iron core	
Inductor, powdered-iron core, bifilar	

TABLE 6.26 Schematic Symbols Used in Electronics (Continued)

Component	Symbol
Inductor, powdered-iron core, tapped	
Inductor, powdered-iron core, variable	
Integrated circuit, general	- (Designoss)
Jack, coaxial or phono	
Jack, phone, two-conductor	
Jack, phone, three-conductor	
Key, telegraph	
Lamp, incandescent	
Lamp, neon	<b>—</b>
Male contact, general	$\rightarrow$
Meter, general	<del>-</del> Ø-
Microammeter	—————————————————————————————————————
Microphone	

TABLE 6.26 Schematic Symbols Used in Electronics (Continued)

Component	Symbol
Microphone, directional	
Milliammeter	——————————————————————————————————————
NAND gate	
Negative voltage connection	<del></del> o -
NOR gate	
NOT gate	
Optoisolator	
OR gate	
Outlet, two-wire, nonpolarized	
Outlet, two-wire, polarized	
Outlet, three-wire	
Outlet, 234-V	
Plate, electron-tube	
Plug, two-wire, nonpolarized	<b>———</b>

TABLE 6.26 Schematic Symbols Used in Electronics (Continued)

Component	Symbol
Plug, two-wire, polarized	<b>————</b>
Plug, three-wire	— <b>()</b>
Plug, 234-V	<del>-</del>
Plug, coaxial or phono	
Plug, phone, two-conductor	
Plug, phone, three-conductor	
Positive voltage connection	<del></del> • +
Potentiometer	
Probe, radio-frequency	05
Rectifier, gas-filled	
Rectifier, high-vacuum	
Rectifier, semiconductor	_
Rectifier, silicon-controlled	

TABLE 6.26 Schematic Symbols Used in Electronics (Continued)

Component	Symbol
Relay, double-pole, double-throw	
Relay, double-pole, single-throw	000000
Relay, single-pole, double-throw	<u>                                      </u>
Relay, single-pole, single-throw	7 300000
Resistor, fixed	
Resistor, preset	->>>-
Resistor, tapped	<b>-</b>
Resonator	
Rheostat	- <b>^</b>
Saturable reactor	
Signal generator	<b>-</b> ⊘-
Solar battery	

TABLE 6.26 Schematic Symbols Used in Electronics (Continued)

Component	Symbol
Solar cell	<u> </u>
Source, constant-current	<b>─</b>
Source, constant-voltage	<u> </u>
Speaker	
Switch, double-pole, double-throw	
Switch, double-pole, rotary	
Switch, double-pole, single-throw	
Switch, momentary-contact	
Switch, silicon-controlled	
Switch, single-pole, rotary	
Switch, single-pole, double-throw	
Switch, single-pole, single-throw	-a-

TABLE 6.26 Schematic Symbols Used in Electronics (Continued)

Component	Symbol
Terminals, general, balanced	o
Terminals, general, unbalanced	
Test point	<b>O</b> TP
Thermocouple	or
Transformer, air core	000000
Transformer, air core, step-down	00000
Transformer, air core, step-up	00000
Transformer, air core, tapped primary	00000
Transformer, air core, tapped secondary	0.00000
Transformer, iron core	000000
Transformer, iron core, step-down	00000
Transformer, iron core, step-up	000000
Transformer, iron core, tapped primary	0.0000
Transformer, iron core, tapped secondary	

TABLE 6.26 Schematic Symbols Used in Electronics (Continued)

Component	Symbol
Transformer, powdered-iron core	00000
Transformer, powdered-iron core, step-down	0000
Transformer, powdered-iron core, step-up	0000
Transformer, powdered-iron core, tapped primary	00000
Transformer, powdered-iron core, tapped secondary	00000 00000
Transistor, bipolar, $NPN$	
Transistor, bipolar, $PNP$	
${\it Transistor, field-effect, N-channel}$	
${\it Transistor, field-effect, P-channel}$	-(1)
Transistor, MOS field-effect, $N$ -channel	
${\it Transistor, MOS field-effect, $P$-channel}$	
${\it Transistor}, {\it photosensitive}, {\it NPN}$	
${\it Transistor}, {\it photosensitive}, {\it PNP}$	

TABLE 6.26 Schematic Symbols Used in Electronics (Continued)

Component	Symbol
Transistor, photosensitive, field-effect, $N$ -channel	
Transistor, photosensitive, field-effect, $P$ -channel	
Transistor, unijunction	
Triac	<b>**</b>
Tube, diode	
Tube, heptode	
Tube, hexode	
Tube, pentode	
Tube, photosensitive	
Tube, tetrode	

TABLE 6.26 Schematic Symbols Used in Electronics (Continued)

Component	Symbol
Tube, triode	
Voltmeter	
Wattmeter	
Waveguide, circular	<del></del>
Waveguide, flexible	<b>-</b>
Waveguide, rectangular	
Waveguide, twisted	
Wires, crossing, connected	(preferred) or (alternative)
Wires, crossing, not connected	(preferred) or (alternative)