

Index of Key Symbols

B	Base connection	Kv	Thermal resistance correction factor
C	Capacitance; junction capacitance; Collector connection	P_{tot}	Power dissipation
C_{CBO}	Collector base capacitance (open emitter)	P_D	Continuous power dissipation
C_{EBO}	Emitter base capacitance (open collector)	P_I	Pulse power dissipation
C_{iss}	Input capacitance	r_b, C_c	Collector base time constant
E	Emitter connection	r_{thA}	Pulse thermal resistance junction to ambient air
f	Frequency	r_{thC}	Pulse thermal resistance junction to case
f_r	Gain bandwidth product	R	Resistance; resistor
F	Noise figure	R_{BE}	Resistance between base and emitter
F_C	Noise figure in mixer stages	R_L	Load resistance
h	Parameters of h-(hybrid) matrix	R_S	Series resistance
h_f	Small signal current gain	R_{th}	Thermal resistance
h_i	Input impedance	R_{thA}	Thermal resistance junction to ambient air
h_o	Output admittance	R_{thC}	Thermal resistance junction to case resp. mounting base
h_r	Reverse voltage transfer ratio	$R_{thC/S}$	Thermal resistance case or mounting base to heat sink
h_{FE}	DC current gain, common emitter	R_{thS}	Thermal resistance heat sink to ambient air
I_B	Base current	t	Time
I_{BM}	Peak base current	t_d	Delay time
I_{B1}	Turn-on current	t_f	Fall time
I_{B2}	Turn-off current	t_{off}	Turn-off time (t_s+t_f)
I_C	Collector current	t_{on}	Turn-on time (t_d+t_r)
I_{CAV}	Average collector current	t_p	Pulse duration
I_{CBO}	Collector base cutoff current (open emitter)	t_{pd}	Propagation delay time
I_{CEO}	Collector emitter cutoff current (open base)	t_r	Rise time
I_{CER}	Collector emitter cutoff current (specified resistance between base and emitter)	t_s	Storage time
I_{CES}	Collector emitter cutoff current (base short-circuited to emitter)	t_{total}	Total switching time ($t_{on}+t_{off}$)
I_{CEV}	Collector emitter cutoff current (specified voltage between base and emitter)	T	Temperature; duration of one period
I_{CM}	Peak collector current	T_{amb}	Ambient temperature
I_E	Emitter current	T_j	Junction temperature
I_{EBO}	Emitter base cutoff current (open collector)	T_C	Case temperature
		T_S	Storage temperature
		T_{SB}	Temperature of substrate backside

Index of Key Symbols

V	Voltage
V_{BB}	Base supply voltage
V_{BE}	Base emitter voltage
V_{BEsat}	Base emitter saturation voltage
$V_{(BR)CBO}$	Collect base breakdown voltage (open emitter)
$V_{(BR)CEO}$	Collector emitter breakdown voltage (open base)
$V_{(BR)CER}$	Collector emitter breakdown voltage (specified resistance between base and emitter)
$V_{(BR)CES}$	Collector emitter breakdown voltage (emitter short-circuited to base)
$V_{(BR)EBO}$	Emitter base breakdwon voltage (open collector)
V_{CB}	Collector base voltage
V_{CBO}	Collector base voltage (open emitter)
V_{CC}	Collector supply voltage
V_{CE}	Collector emitter voltage
V_{CEO}	Collector emitter voltage (open base)
V_{CER}	Collector emitter voltage (specified resistance between base and emitter)
V_{CES}	Collector emitter voltage (emitter short-circuit to base)
V_{CEsat}	Collector emitter saturation voltage
V_{CEV}	Collector emitter voltage (specified voltage between base and emitter)
V_{EBO}	Emitter base voltage (open collector)
V_{EE}	Emitter supply voltage
V_i	Input voltage
V_o	Output voltage
T_s	Storage time constant
V	Duty cycle (tp/T)