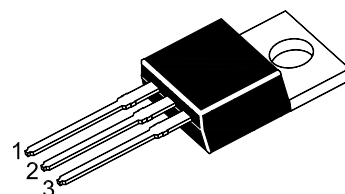


BD910 / BD912

PNP Complementary Silicon Power Transistors

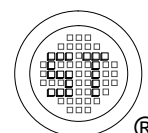


1.Base 2.Collector 3.Emitter

TO-220 Plastic Package

Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Value		Unit
		BD910	BD912	
Collector Base Voltage	$-V_{CBO}$	80	100	V
Collector Emitter Voltage	$-V_{CEO}$	80	100	V
Emitter Base Voltage	$-V_{EBO}$	5		V
Collector Current	$-I_C$	15		A
Base Current	$-I_B$	5		A
Total Power Dissipation @ $T_C \leq 25\text{ }^{\circ}\text{C}$	P_{tot}	90		W
Operating Junction Temperature Range	T_J	150		$^{\circ}\text{C}$
Storage Junction Temperature Range	T_J, T_s	-65 to +150		$^{\circ}\text{C}$
Thermal Resistance, Junction to Case	$R_{\theta JC}$	1.4		$^{\circ}\text{C/W}$

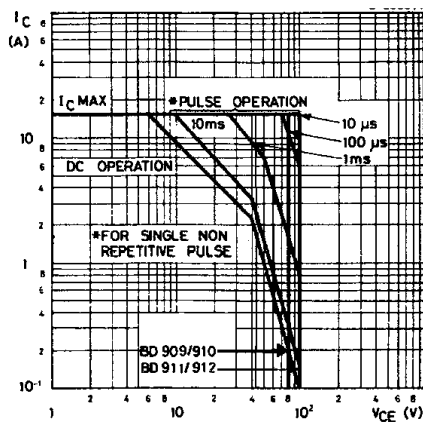


BD910 / BD912

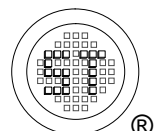
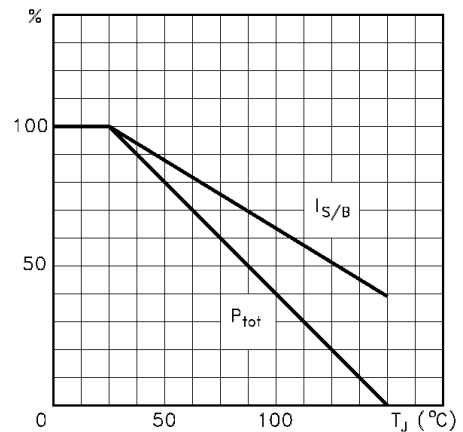
Characteristics at $T_c = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain				
at $-V_{CE} = 4\text{ V}$, $-I_C = 0.5\text{ A}$	h_{FE}	40	250	-
at $-V_{CE} = 4\text{ V}$, $-I_C = 5\text{ A}$	h_{FE}	15	150	-
at $-V_{CE} = 4\text{ V}$, $-I_C = 10\text{ A}$	h_{FE}	5	-	-
Collector Emitter Sustaining Voltage				
at $-I_C = 100\text{ mA}$ BD910	$-V_{CEO(sus)}$	80	-	V
BD912		100	-	
Collector Cutoff Current				
at $-V_{CB} = 80\text{ V}$ BD910	$-I_{CBO}$	-	0.5	mA
at $-V_{CB} = 100\text{ V}$ BD912	$-I_{CBO}$	-	0.5	mA
Collector Cutoff Current				
at $-V_{CE} = 40\text{ V}$ BD910	$-I_{CEO}$	-	1	mA
at $-V_{CE} = 50\text{ V}$ BD912	$-I_{CEO}$	-	1	mA
Emitter Cutoff Current				
at $-V_{EB} = 5\text{ V}$	$-I_{EBO}$	-	1	mA
Collector Emitter Saturation Voltage				
at $-I_C = 5\text{ A}$, $-I_B = 0.5\text{ A}$	$-V_{CE(sat)}$	-	1	V
at $-I_C = 10\text{ A}$, $-I_B = 2.5\text{ A}$	$-V_{CE(sat)}$	-	3	V
Base Emitter Saturation Voltage				
at $-I_C = 10\text{ A}$, $-I_B = 2.5\text{ A}$	$-V_{BE(sat)}$	-	2.5	V
Base Emitter Voltage				
at $-I_C = 5\text{ A}$, $-V_{CE} = 4\text{ V}$	$-V_{BE}$	-	1.5	V
Transition Frequency				
at $-V_{CE} = 4\text{ V}$, $-I_C = 0.5\text{ A}$,	f_T	3	-	MHz

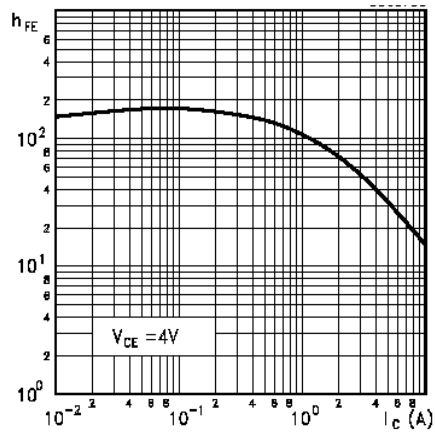
Safe Operating Area



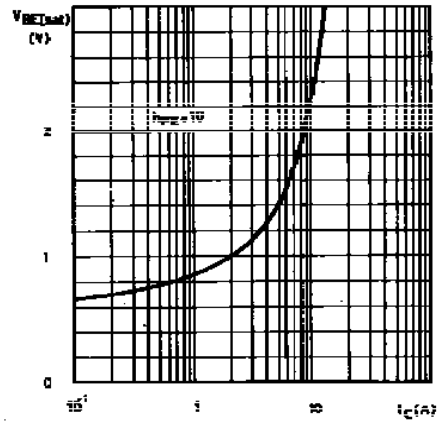
Derating Curves



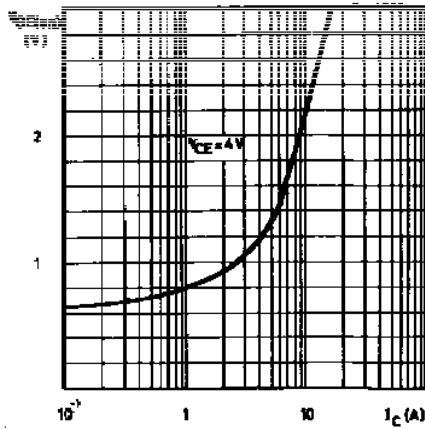
DC Current Gain



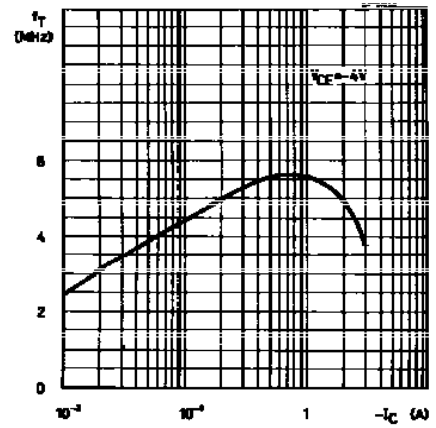
Base-Emitter Saturation Voltage



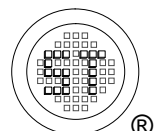
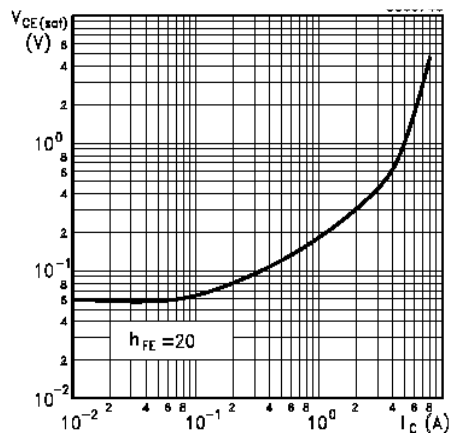
DC Transconductance



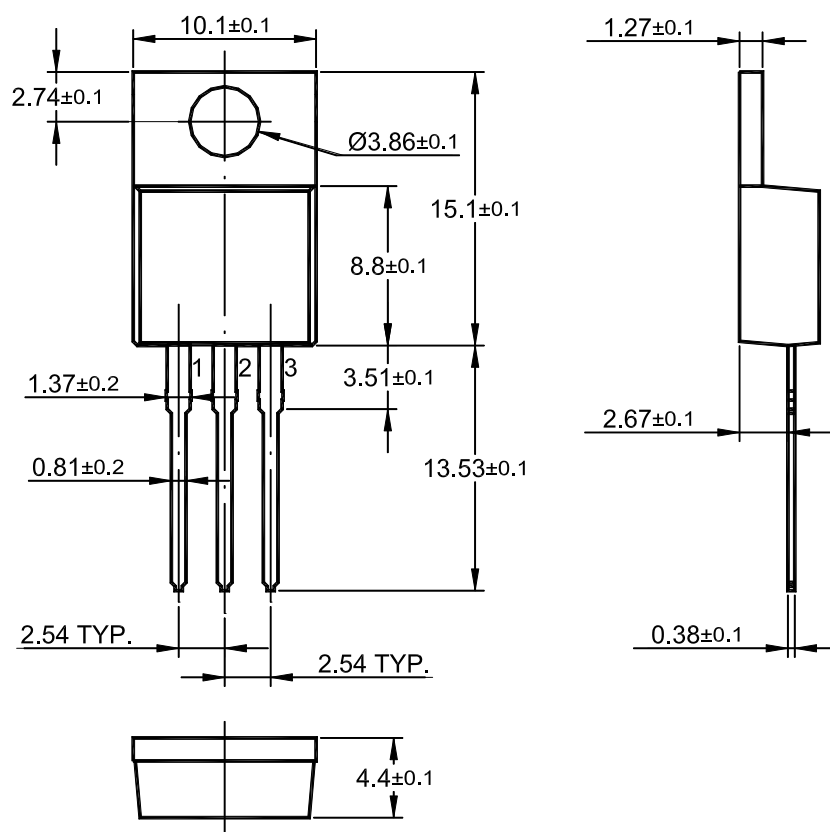
Transition Frequency



Collector-Emitter Saturation Voltage



TO-220 PACKAGE OUTLINE



Dimensions in mm

