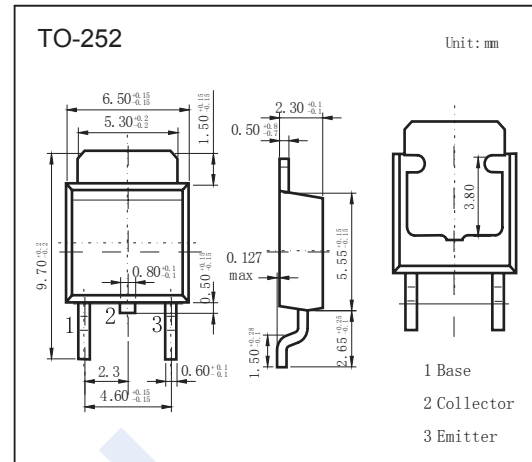


PNP Transistors

2SA1875

■ Features

- High f_T : $f_T=400\text{MHz}(\text{typ})$.
- High breakdown voltage
- Large current capacitance.
- Complements to 2SC4976

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-200	V
Collector - Emitter Voltage	V_{CE0}	-200	
Emitter - Base Voltage	V_{EB0}	-3	
Collector Current - Continuous	I_C	-300	mA
Collector Current - Pulse	I_{CP}	-600	
Base Current	I_B	-30	
Collector Power Dissipation	P_C	0.8	W
$T_c=25^\circ\text{C}$		12	
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = -100\ \mu\text{A}$, $I_E = 0$	-200			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1\ \text{mA}$, $R_{BE} = \infty$	-200			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100\ \mu\text{A}$, $I_C = 0$	-3			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -150\ \text{V}$, $I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = -2\ \text{V}$, $I_C = 0$			-1	
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C = -50\ \text{mA}$, $I_B = -5\ \text{mA}$			-1	V
Base - emitter saturation voltage	$V_{BE(\text{sat})}$	$I_C = -50\ \text{mA}$, $I_B = -5\ \text{mA}$			-1	
DC current gain	h_{FE}	$V_{CE} = -10\ \text{V}$, $I_C = -50\ \text{mA}$	60		320	
		$V_{CE} = -10\ \text{V}$, $I_C = -250\ \text{mA}$	20			
Collector output capacitance	C_{ob}	$V_{CB} = -30\ \text{V}$, $I_E = 0$, $f = 1\ \text{MHz}$		5		pF
Reverse Transfer Capacitance	C_{ce}	$V_{CB} = -30\ \text{V}$, $I_E = 0$, $f = 1\ \text{MHz}$		4.2		
Transition frequency	f_T	$V_{CE} = -10\ \text{V}$, $I_C = -100\ \text{mA}$		400		MHz

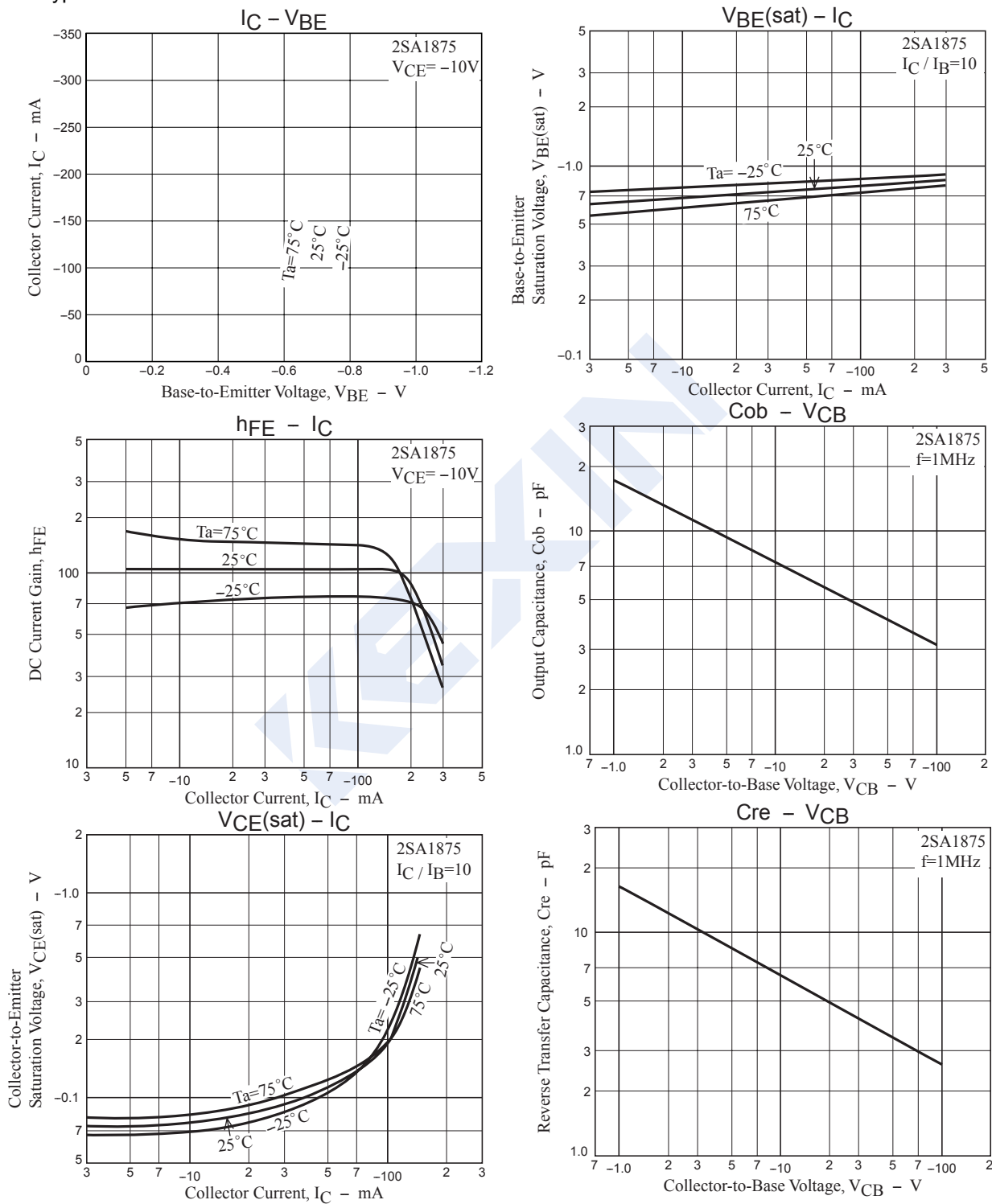
■ Classification of $h_{FE}(1)$

Type	2SA1875-D	2SA1875-E	2SA1875-F
Range	60-120	100-200	160-320

PNP Transistors

2SA1875

■ Typical Characteristics



PNP Transistors

2SA1875

■ Typical Characteristics

