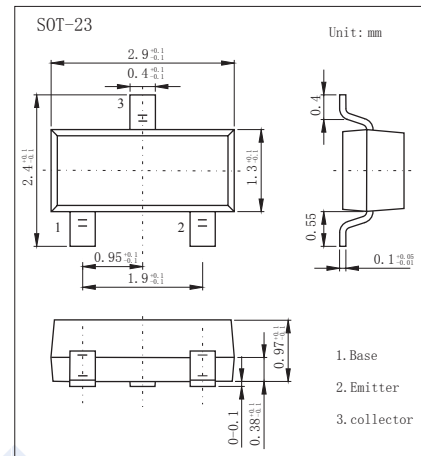


NPN Transistors

2SC4050

■ Features

- Collector Current Capability $I_C=100\text{mA}$
- Collector Emitter Voltage $V_{CEO}=120\text{V}$

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	120	V
Collector - Emitter Voltage	V_{CEO}	120	
Emitter - Base Voltage	V_{EBO}	5	
Collector Current - Continuous	I_C	100	mA
Collector Power Dissipation	P_C	150	mW
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_{CBO}	$I_C = 100\ \mu\text{A}$, $I_E = 0$	120			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = 1\ \text{mA}$, $I_B = 0$	120			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100\ \mu\text{A}$, $I_C = 0$	5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 70\text{V}$, $I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 2\text{V}$, $I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10\text{mA}$, $I_B = 1\text{mA}$			0.1	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 10\text{mA}$, $I_B = 1\text{mA}$			1.1	
DC current gain	h_{FE}	$V_{CE} = 12\text{V}$, $I_C = 2\text{mA}$	250		800	

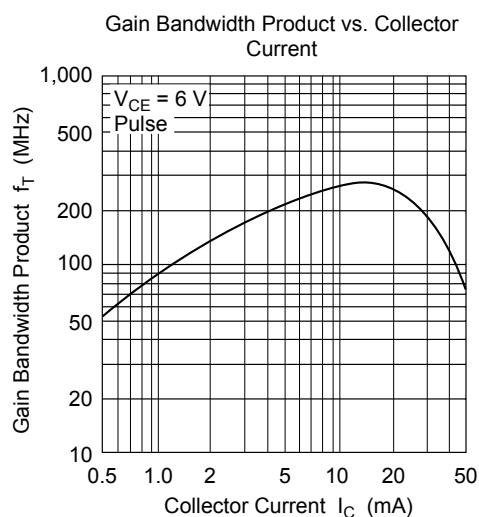
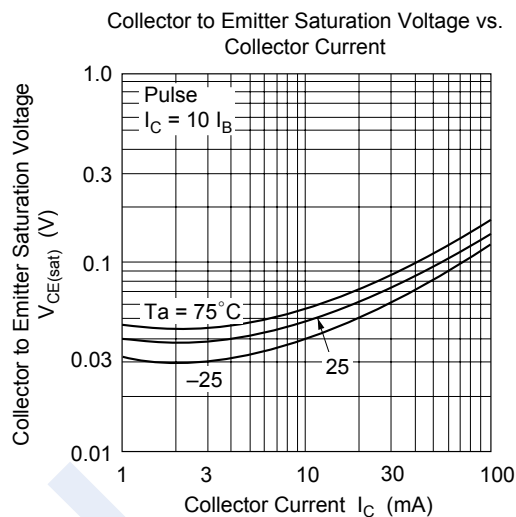
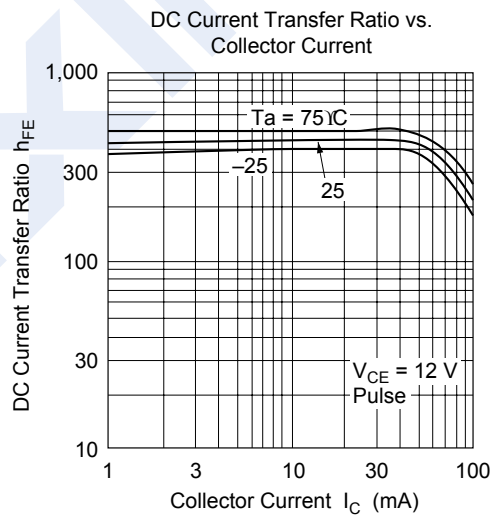
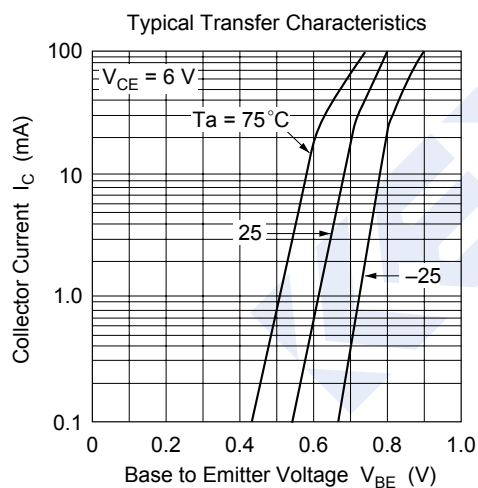
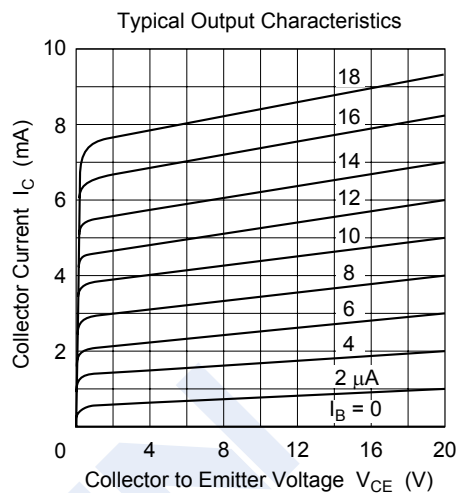
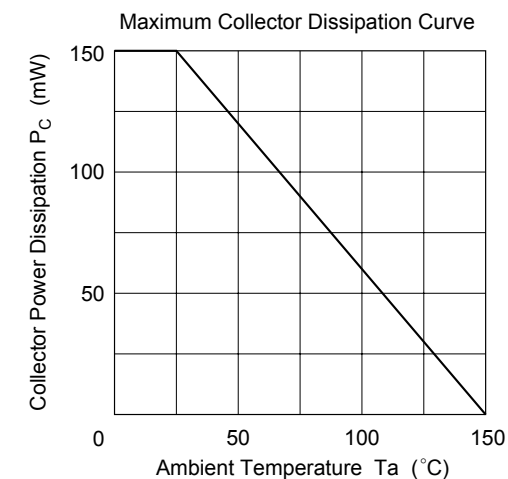
■ Classification of h_{FE}

Type	2SC4050-D	2SC4050-E
Range	250-500	400-800
Marking	KID	KIE

NPN Transistors

2SC4050

■ Typical Characteristics



NPN Transistors

2SC4050

■ Typical Characteristics

