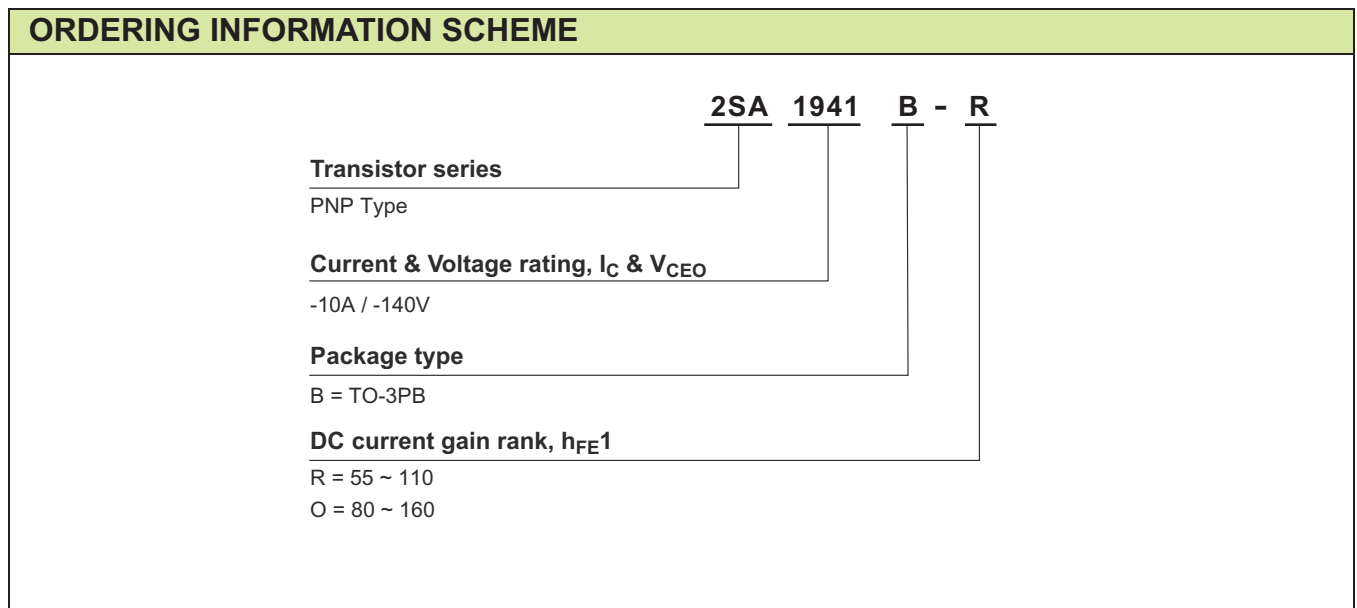
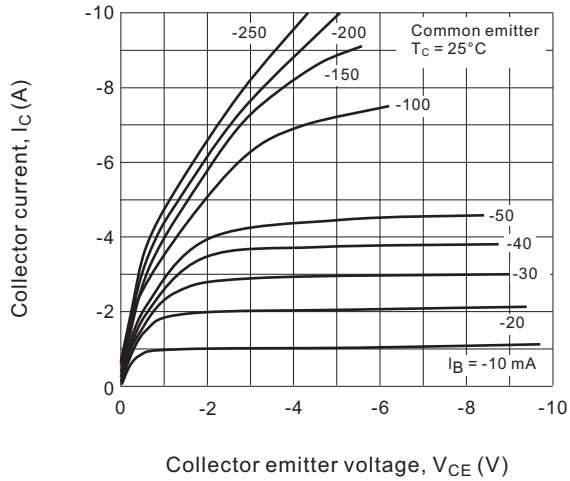




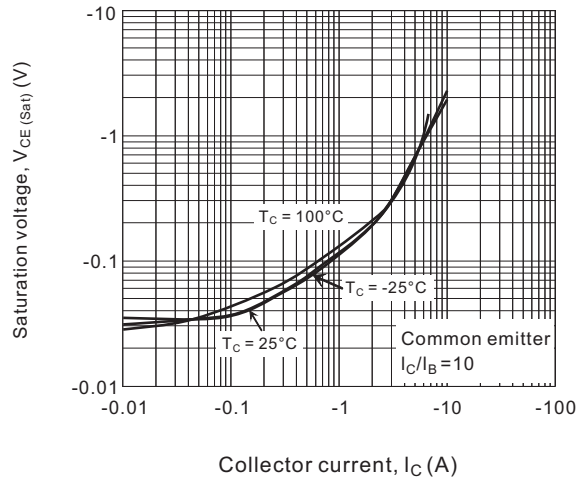
ELECTRICAL CHARACTERISTICS (T <sub>a</sub> = 25°C)						
SYMBOL	PARAMETER	CONDITIONS	VALUE			UNIT
			MIN.	TYP.	MAX.	
I <sub>CBO</sub>	Collector cutoff current	V <sub>CB0</sub> = -140V, I <sub>E</sub> = 0			-5.0	μA
I <sub>EBO</sub>	Emitter cutoff current	V <sub>EBO</sub> = -5V, I <sub>C</sub> = 0			-5.0	
V <sub>(BR)CEO</sub>	Collector to emitter breakdown voltage	I <sub>CEO</sub> = -50mA, I <sub>B</sub> = 0	-140			V
V <sub>CB0</sub>	Collector to base voltage	I <sub>CBO</sub> = -5 μA	-140			
V <sub>EBO</sub>	Emitter to base voltage	I <sub>EBO</sub> = -5.0 μA	-5			
h <sub>FE1</sub>	Forward current transfer ratio (DC current gain)	V <sub>CE</sub> = -5V, I <sub>C</sub> = -1A	Rank-R	55		110
			Rank-O	80		160
h <sub>FE2</sub>		V <sub>CE</sub> = -5V, I <sub>C</sub> = -5A	35	83		
V <sub>CE(sat)</sub>	Collector to emitter saturation voltage	I <sub>C</sub> = -7A, I <sub>B</sub> = -0.7A		-0.8	-2.0	V
V <sub>BE</sub>	Base to emitter voltage	V <sub>CE</sub> = -5V, I <sub>C</sub> = -5A		-1.0	-1.5	
f <sub>T</sub>	Transition frequency (Gain-Bandwidth product)	V <sub>CE</sub> = -5V, I <sub>C</sub> = -1A		30		MHz
C <sub>ob</sub>	Collector output capacitance	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f = 1MHz		320		pF



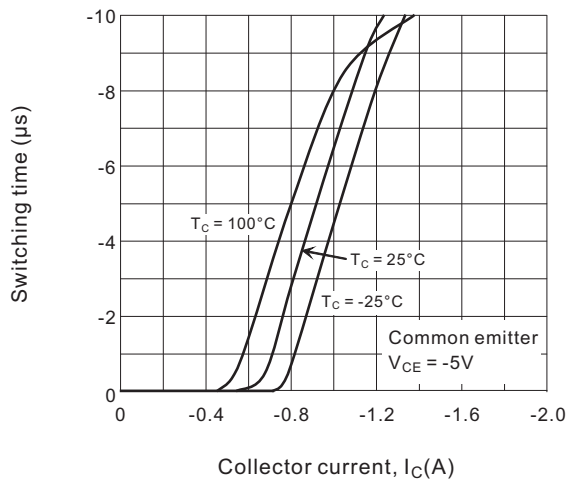
**Fig.1 Collector output characteristics**



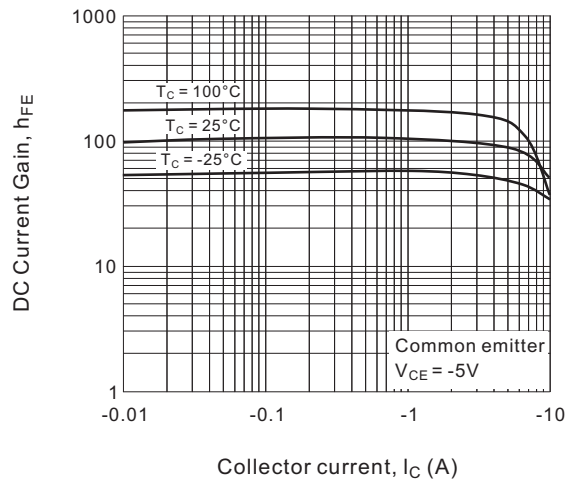
**Fig.2 Collector-Emitter saturation voltage**



**Fig.3 I\_C-V\_BE characteristics**



**Fig.4 DC current gain**



**Fig.5 Safe operating area**

