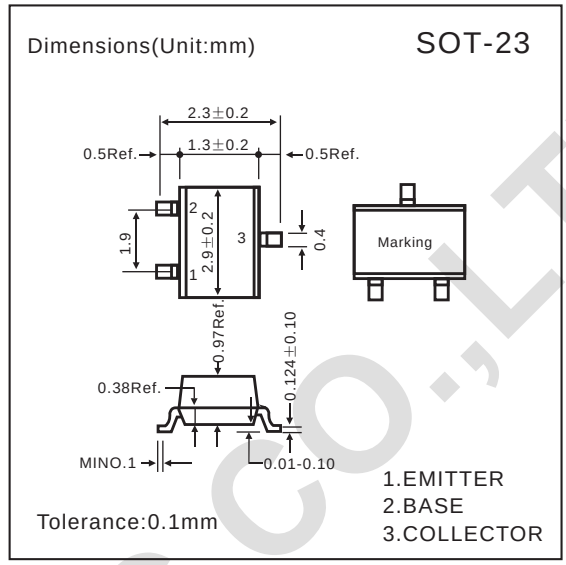
WEJ®

RoHS

2SC5343

SOT-23 TRANSISTOR



GENERAL PURPOSE TRANSISTOR

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- Collector Dissipation:Pc=225mW
- Collector-Emitter Voltage:V_{CEO}=40V
- NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	Ic	200	mA
Collector Dissipation	Pc	225	mW
Junction Temperature	T_j	150	°C
Storage Temperature	Tstg	-50~150	°C

Electrical Characteristics

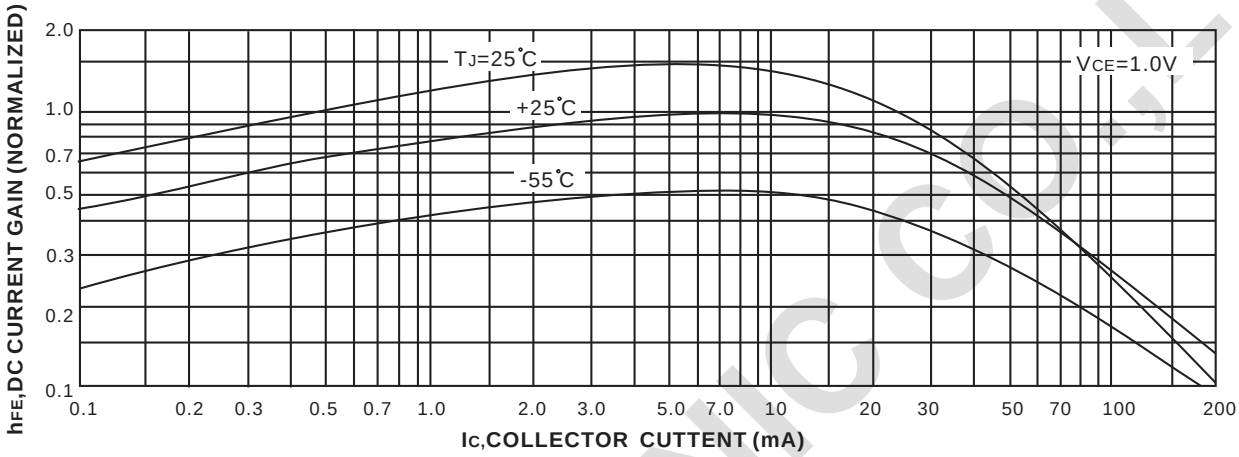
(Ta=25°C)

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Collector-Emitter Breakdown Voltage	BV_{CEO}	40			V	I_C=1mA I_B=0
Collector-Base Breakdown Voltage	BV_{CBO}	60			V	I_C=10μA I_E=0
Emitter-Base Breakdown Voltage	BV_{EBO}	6			V	I_E=10μA I_C=0
Collector Cut-off Current	I_{CEO}			50	nA	V_{CB}=30V, V_{EB}=3V
Emitter-Base Cutoff Current	I_{EBO}			50	nA	V_{CB}=3V, I_C=0
DC Current Gain	h_{FE1}	40				V_{CE}=1V, I_C=0.1mA
DC Current Gain	h_{FE2}	70				V_{CE}=1V, I_C=1mA
DC Current Gain	h_{FE3}	100		300		V_{CE}=1V, I_C=10mA
DC Current Gain	h_{FE4}	60				V_{CE}=1V, I_C=50mA
DC Current Gain	h_{FE5}	30				V_{CE}=1V, I_C=100mA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.2	V	I_C=10mA, I_B=1mA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.3	V	I_C=50mA, I_B=5mA
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	0.65		0.85	V	I_C=10mA, I_B=1mA
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			0.95	V	I_C=50mA, I_B=5mA
Output Capacitance	C_{ob}			4	PF	V_{CE}=5V, I_C=0,f=1MHz
Current Gain-Bandwidth Product	f_T	300			MHz	V_{CE}=20V, I_C=10mA,f=100MHz

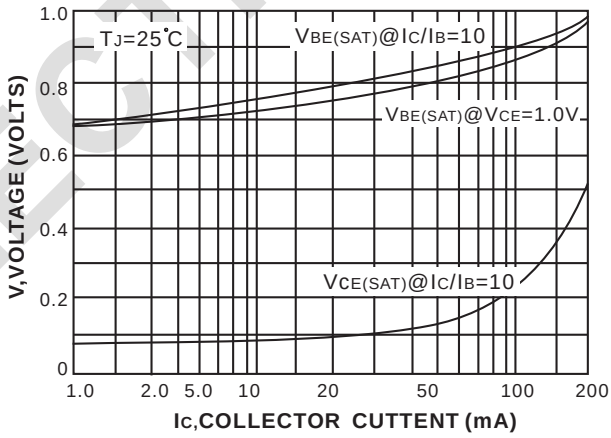
Total Device Dissipation:FR=1X0.75X0.062 in Board Derate 25°C

Pulse Test: Pulse Width 300uS Duty cycle 2%

Typical Characteristics



DC Current Gain



"On" Voltages