

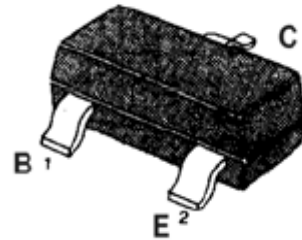
2SC380

NPN EPITAXIAL SILICON TRANSISTOR

ABSOLUTE MAXIMUM RATINGS(TA=25 °C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	35	V
Collector-Emitter Voltage	V _{CEO}	30	V
Emitter -Base Voltage	V _{EB0}	4	V
Collector Current	I _c	50	mA
Emitter Current	I _E	-50	mA
Collector Dissipation	P _c	300	mW
Junction Temperature	T _J	125	°C
Storage Temperature		-55 ~150	°C

SOT-23



ELECTRICAL CHARACTERISTICS(TA=25 °C)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Cut-off Current	I _{CB0}	V _{CB} = 35V, I _E =0			0.1	μ A
Emitter-Cut-off Current	I _{EB0}	V _{EB} = 4V, I _c =0			0.1	μ A
DC Current Gain	H _{fe}	V _{CE} = 12V, I _c = 2mA	40		240	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _c = 10mA, I _B = 1mA			0.4	V
Base-Emitter Voltage	V _{BE}	I _c = 10mA, I _B = 1mA			1.0	V
Current Gain-Bandwidth Product	f _T	V _{CE} = 10V, I _c = 1mA	100		400	MHZ
Output Capacitance	C _{OB}	V _{CB} = 10V, I _E =0, f=1MHZ	1.4	2.0	3.2	pF
Collector Base Time Const	C _{c,rb}	V _{CE} = 10V, I _E = 1mA R _G =10KΩ , F=1HZ	10		50.0	Ps
Power Gain	G _{pe}	V _{CC} = 6V, I _E = 1mA F=10.7MHZ	27	29.0	33.0	dB

H_{fe} CLASSIFICATION

Classification	R	O	Y
HFE	40-80	70-140	120-240