



NPN EPITAXIAL PLANAR SILICON TRANSISTORS

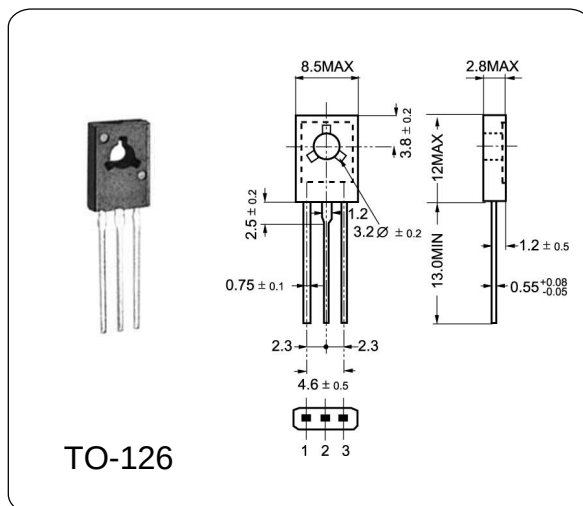
2SC2314

DESCRIPTION

27 MHz CB Transceiver Driver Applications

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	I	Value	Unit
Collector-Base Voltage	V_{CBO}	75	V
Collector-Emitter Voltage	V_{CEO}	45	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	1.0	A
	I_{CP}	1.5	A
Total Dissipation at	P_{tot}	5.0	W
Max. Operating Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector Cut-off Current	I_{CBO}	$V_{CB}=40V, I_E=0$	—	—	1.0	uA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=4.0V, I_C=0$	—	—	1.0	uA
Collector-Emitter Sustaining Voltage	V_{CEO}	$I_C=1.0mA, I_B=0$	45	—	—	V
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=0.5A$	60	—	320	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=0.5A, I_B=50mA$	—	—	0.6	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=0.5A, I_B=50mA$	—	—	1.2	V
Current Gain Bandwidth Product	f_T	$V_{CE}=10V, I_C=50mA$	180	—	—	MHz
Qutput Capacitance	C_{ob}	$V_{CB}=10V, f=10MHz$			25	pF

Hfe Classification: D=60~120 , E=100-200, F=160-320