



## NPN EPITAXIAL PLANAR SILICON TRANSISTORS

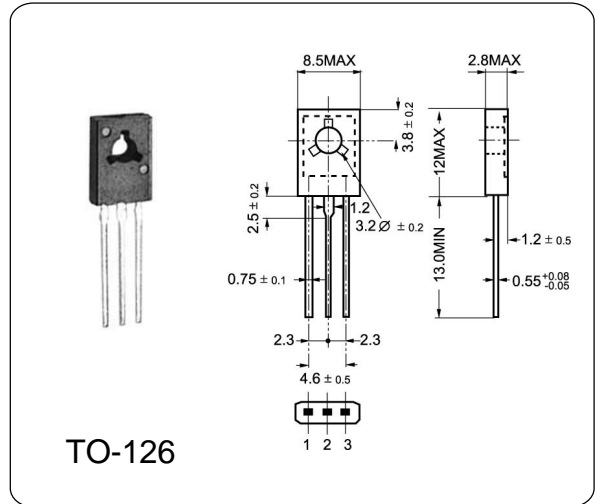
## 2SC2314

### 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
Output Capacitance	$C_{ob}$	$V_{CB}=10V, f=10MHz$			25	pF

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