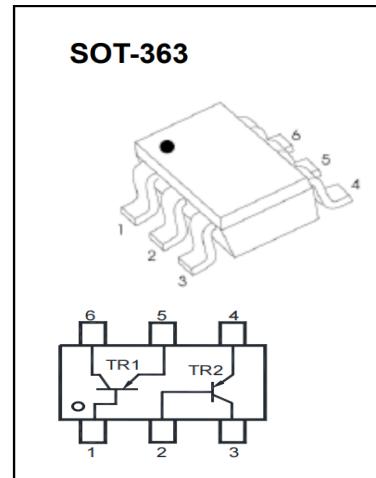


## TRANSISTOR (PNP)

### FEATURES

- Halogen and Antimony Free(HAF),  
RoHS compliant

**MARKING: 5021**



### MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	50	V
Collector Emitter Voltage	$-V_{CEO}$	45	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	100	mA
Peak Collector Current, Pulsed	$-I_{CM}$	100	mA
Total Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{Stg}$	- 55 to + 150	°C

### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE} = 5 \text{ V}$ , $-I_C = 2 \text{ mA}$	$h_{FE}$	220	475	-
Collector Base Voltage at $-I_C = 10 \mu\text{A}$	$-V_{CBO}$	50	-	V
Collector Emitter Voltage at $-I_C = 10 \text{ mA}$	$-V_{CEO}$	45	-	V
Emitter Base Voltage at $-I_E = 1 \mu\text{A}$	$-V_{EBO}$	5	-	V
Collector Base Cutoff Current at $-V_{CB} = 30 \text{ V}$	$-I_{CBO}$	-	15	nA
Emitter Base Cutoff Current at $-V_{EB} = 5 \text{ V}$	$-I_{EBO}$	-	100	nA
Collector Emitter Saturation Voltage at $-I_C = 10 \text{ mA}$ , $-I_B = 0.5 \text{ mA}$ at $-I_C = 100 \text{ mA}$ , $-I_B = 5 \text{ mA}$	$-V_{CE(sat)}$	-	0.2 0.4	V
Base Emitter Voltage at $-V_{CE} = 5 \text{ V}$ , $-I_C = 2 \text{ mA}$ at $-V_{CE} = 5 \text{ V}$ , $-I_C = 10 \text{ mA}$	$-V_{BE}$	0.6 -	0.75 0.82	V
Transition Frequency at $-V_{CE} = 5 \text{ V}$ , $-I_C = 10 \text{ mA}$ , $f = 100 \text{ MHz}$	$f_T$	100	-	MHz
Output Capacitance at $-V_{CB} = 10 \text{ V}$ , $I_E = 0$ , $f = 1 \text{ MHz}$	$C_{ob}$	-	4.5	pF