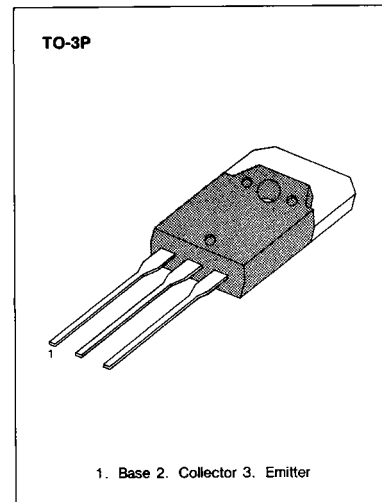


## NPN Transistor KSC5047 datasheet

**HIGH CURRENT GAIN  
LOW COLLECTOR EMITTER SATURATION  
VOLTAGE**

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

Characteristic	Symbol	Rating	Unit
Collector Base Voltage	$V_{CBO}$	100	V
Collector Emitter Voltage	$V_{CEO}$	50	V
Emitter Base Voltage	$V_{EBO}$	15	V
Collector Current	$I_C$	15	A
Base Current	$I_B$	4	A
Collector Dissipation	$P_c$	100	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	- 55 ~ 150	$^\circ\text{C}$



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

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Emitter Breakdown Voltage	$BV_{CEO}$	$I_C = 50\text{mA}, I_B = 0$	50			V
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 100\text{V}, I_E = 0$			100	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 15\text{V}, I_C = 0$			100	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE} = 0.5\text{V}, I_C = 5\text{A}$	40			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 5\text{A}, I_B = 0.12\text{A}$			0.5	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 5\text{A}, I_B = 0.12\text{A}$			1.2	V
Turn On Time	$t_{on}$	$V_{CC} = 20\text{V}$		0.5		$\mu\text{S}$
Storage Time	$t_{stg}$	$I_C = 5\text{A}$		2.5		$\mu\text{S}$
Fall Time	$t_f$	$I_{B1} = - I_{B2} = 0.12\text{A}$		0.5		$\mu\text{S}$

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