



### Complementary Silicon High Power Ttransistors

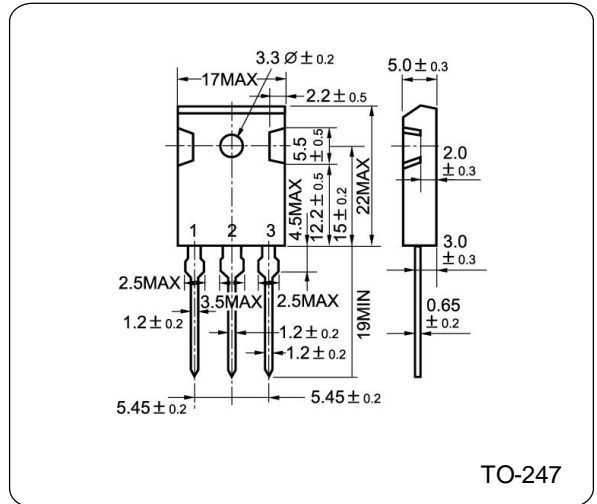
### TIP3055 / TIP2955

#### DESCRIPTION

The TIP3055 is a silicon Epitaxial-Base Planar NPN transistor mountend in TO-247 plastic package. It is intended for power switching circuits, series and shunt regulators, output stages and hi-fi amplifiers. The complementary PNP type is the TIP2955.

#### ABSOLUTE MAXIMUM RATINGS ( Ta = 25 °C)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	$V_{CBO}$	100	V
Collector-Emitter Voltage	$V_{CEO}$	60	V
Emitter-Base Voltage	$V_{EBO}$	7.0	V
Collector Current	$I_C$	15	A
Base Current	$I_B$	7	A
Total Dissipation at	$P_{tot}$	90	W
Max. Operating Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-55~150	°C



TO-247

#### ELECTRICAL CHARACTERISTICS ( Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector Cut-off Current	$I_{CEO}$	$V_{CB}=50V, I_E=0$	—	—	0.7	mA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=7.0V, I_C=0$	—	—	5.0	mA
Collector-Emitter Sustaining Voltage	$V_{CEO}$	$I_C=30mA, I_B=0$	60	—	—	V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=4.0V, I_C=4.0A$	20	—	70	
	$h_{FE(2)}$	$V_{CE}=4.0V, I_C=10A$	5	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4.0A, I_B=0.4A$	—	—	1.0	V
		$I_C=10A, I_B=3.3A$	—	—	3.0	
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=4.0V, I_C=4.0A$	—	—	1.8	V
Transition Frequency	$f_T$	$V_{CE}=10V, I_C=0.5A$	3	—	—	MHz