



## Complementary Silicon Power Transistors

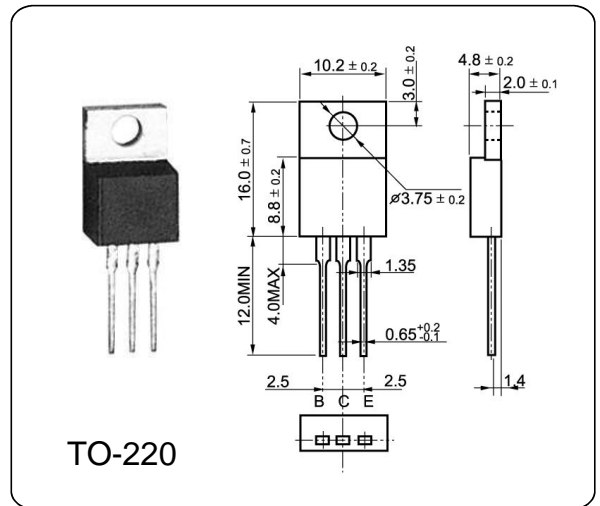
## TIP41C / TIP42C

### DESCRIPTION

It is intended for use in power amplifier and switching applications.

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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	$V_{CBO}$	100	V
Collector-Emitter Voltage	$V_{CEO}$	100	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	6.0	A
Base Current	$I_B$	2.0	A
Total Dissipation at	$P_{tot}$	65	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	$I_{CEO}$	$V_{CB}=100V, I_E=0$			0.3	mA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			1.0	mA
Collector-Emitter Sustaining Voltage	$V_{CEO}$	$I_C=30mA, I_B=0$	100			V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=4V, I_C=0.3A$	30			
	$h_{FE(2)}$	$V_{CE}=4V, I_C=3.0A$	15		75	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=6.0A, I_B=600mA$			1.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$V_{CE}=4V, I_C=6.0A$			2.0	V
Current Gain Bandwidth Product	$f_T$	$V_{CE}=10V, I_C=500mA$	3			MHz