

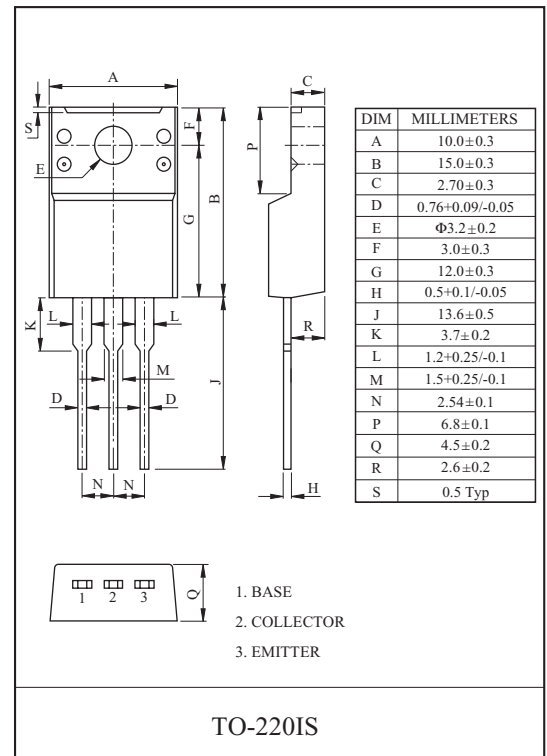
GENERAL PURPOSE APPLICATION.

FEATURES

- Complementary to TIP41CF.
- Suffix U : Qualified to AEC-Q101.
ex) TIP42CF-U/PU

MAXIMUM RATING (Ta=25)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-100	V
Collector-Emitter Voltage		V_{CEO}	-100	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current	DC	I_C	-6	A
	Pulse	I_{CP}	-10	
Base Current		I_B	-2	A
Collector Power Dissipation	Ta=25	P_C	2	W
	Tc=25		25	
Junction Temperature		T_j	150	
Storage Temperature Range		T_{stg}	-55 150	



ELECTRICAL CHARACTERISTICS (Ta=25)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Emitter Sustaining Voltage	$V_{CEO(SUS)}$	$I_C=-30mA, I_B=0$	-100	-	-	V
Collector Cut-off Current	I_{CEO}	$V_{CE}=-60V, I_B=0$	-	-	-0.7	mA
Collector Cut-off Current	I_{CES}	$V_{CE}=-100V, V_{EB}=0$	-	-	-400	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5V, I_C=0$	-	-	-1	mA
DC Current Gain	h_{FE}	$V_{CE}=-4V, I_C=-0.3A$	30	-	-	
		$V_{CE}=-4V, I_C=-3A$	15	-	75	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-6A, I_B=-600mA$	-	-	-1.5	V
Base-Emitter On Voltage	$V_{BE(on)}$	$V_{CE}=-4V, I_C=-6A$	-	-	-2.0	V
Transition Frequency	f_T	$V_{CE}=-10V, I_C=-500mA$	3.0	-	-	MHz

TIP42CF

