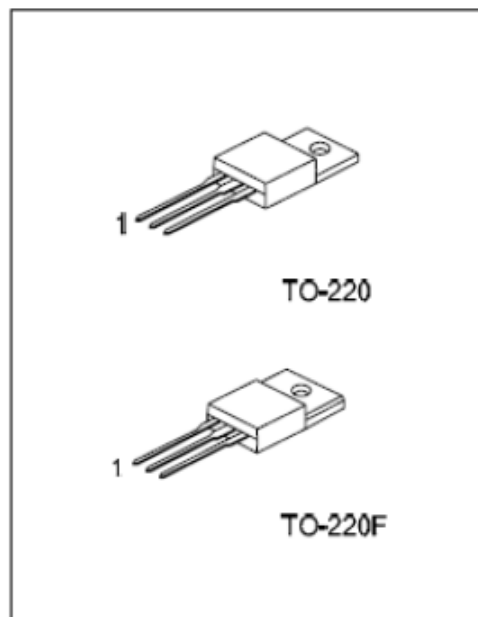


NPN EPITAXIAL TRANSISTOR

DESCRIPTION

The YR TIP122 is a NPN epitaxial transistor, designed for use in general purpose amplifier low-speed switching applications.



1:EMITTER 2:COLLECTOR 3:BASE

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector to Base Voltage	V_{CBO}	100	V
Collector to Emitter Voltage	V_{CEO}	100	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current	I_C	5	A
Collector Dissipation (Tc=25°C)	P_C	40	W
Storage Temperature	T_{stg}	-55 ~ +150	°C
Junction Temperature	T_j	150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=100mA$	100			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=100V$			200	uA
Collector-Cut-Off Current	I_{CEO}	$V_{CE}=50V$			500	uA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5V$			2	mA
Collector-Emitter Saturation Voltage	$V_{CE(SAT)1}$	$I_C=3A, I_B=12mA$			2	V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)2}$	$I_C=5A, I_B=20mA$			4	V
Base-Emitter Saturation Voltage	$V_{BE(ON)}$	$V_{CE}=3V, I_C=3A$			2.5	V
DC Current Gain	h_{FE}	$I_C=500mA, V_{CE}=3V$ $I_C=3A, V_{CE}=3V$	1000 1000			

