



## Complementary Power Darlington TR

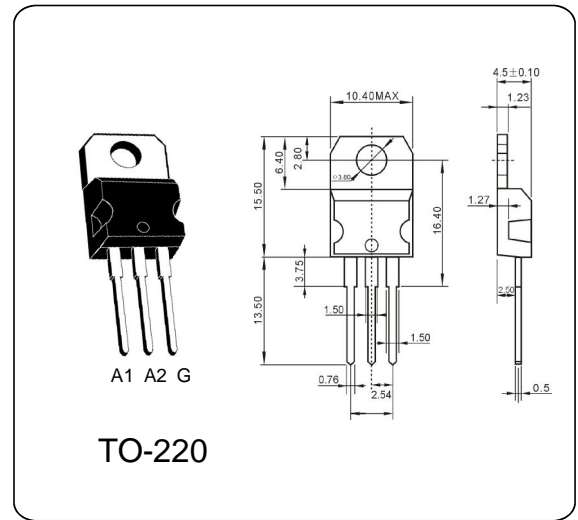
## BDW93C / BDW94C

### 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
Collector Current	$I_C$	12	A
Base Current	$I_B$	0.2	A
Total Dissipation at	$P_{tot}$	80	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	$I_{CBO}$	$V_{CE}=100V, I_E=0$			0.1	mA
Collector Cut-off Current	$I_{CEO}$	$V_{CE}=100V, I_B=0$			1.0	mA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			2.0	mA
Collector-Emitter Sustaining Voltage	$V_{CEO}$	$I_C=100mA, I_B=0$	100			V
DC Current Gain	$h_{FE}$	$V_{CE}=3V, I_C=3A$	1000		20000	
		$V_{CE}=3V, I_C=5A$	750		20000	
		$V_{CE}=3V, I_C=10A$	100		20000	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=5A, I_B=20mA$			2.0	V
		$I_C=10A, I_B=100mA$			3.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=5A, I_B=20mA$			2.5	V
		$I_C=10A, I_B=100mA$			4.0	V
Parallel Diode Forward Voltage	$V_F$	$I_F=5A$		1.3		V
		$I_F=10A$		1.8		V