

# Technical Data

## TRANSISTOR

### maximum ratings

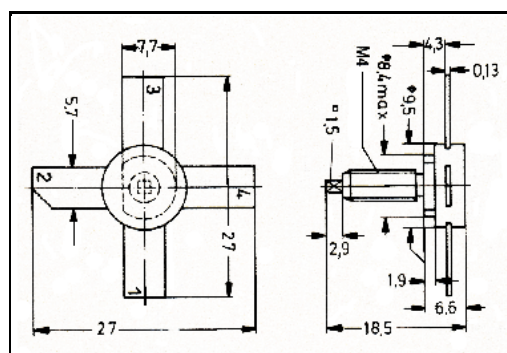
Voltage, Collector to Base (VCBO)	65.0	V	NO.	BLY93C
Voltage, Collector to Emitter (VCE)	36.0	V	TYPE	NPN-RF
Voltage, Emitter to Base (VEBO)	4.0	V		
Collector Current (IC)	3.0	A		
Base Current (IB)	1.0	A	CASE	SOT-120_M-4
Max. Power Dissipation (PT) at TC = 25 °C	70.0	W		
Max. Thermal Resistance (Rth J-C)	3.1	°C/W		
Max. Junction Temperature (TJ)	200.0	°C		

### PERFORMANCE CHARACTERISTICS at $T_c = 25^\circ\text{C}$ , unless otherwise noted

NO.	SYMBOL	CONDITIONS	MIN.	MAX.	UNITS
1.	BVCBO	IC = 10.0 mA	65.0	-	V
2.	BVCEO	IC = 50.0 mA (1)	36.0	-	V
3.	BVEBO	IE = 10.0 mA	4.0	-	V
4.	ICEO	VCE = 36.0 V	-	4.0	mA
5.	hFE	IC = 1.25 A, VCE = 5.0 V (1)	10.0	100.0	-
6.	fT	IC = 1.25 A, VCE = 28.0 V (2)	625.0	-	MHz
7.	Cobo	VCB = 30.0 V, f = 1.0 MHz	-	45.0	pF
8.	PIN	VCE = 28.0 V, Pout = 25.0 W, f = 175.0 MHz	-	3.15	W
9.	GPE	VCE = 28.0 V, Pout = 25.0 W, f = 175.0 MHz	9.0	-	dB
10.	$\eta$	VCE = 28.0 V, Pout = 25.0 W, f = 175.0 MHz	60.0	-	%
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					

Notes (1) pulse-tested  $t_p \leq 300 \mu\text{s}$ , duty cycle  $\leq 2\%$   
(2) typical value

DIMENSIONS  
in mm



Marking BLY93C  
Customer GENERAL PURPOSE