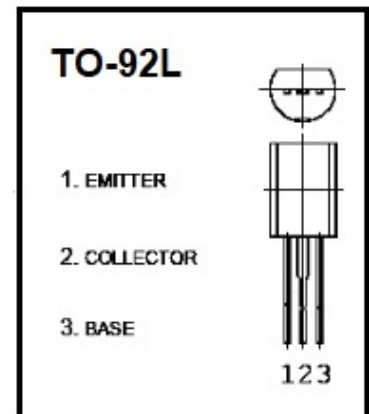


# 2SD863

- Complementary to: 2SB764
- Package: TO-92L

## Maximum Ratings (Ta = 25°)

Parameter	Symbol	Rating	Unit
Collector-base voltage	$BV_{CBO}$	60	V
Collector-emitter voltage	$BV_{CEO}$	50	V
Emitter-base voltage	$BV_{EBO}$	5	V
Collector current	$I_{CM}$	1	A
Collector Power Dissipation	$P_C$	900	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-55 ~ +150	°C



## Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C=10\mu A, I_E=0$	60			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=1mA, I_B=0$	50			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E=10\mu A, I_C=0$	5			V
collector-base cut-off current	$I_{CBO}$	$V_{CB}=50V, I_E=0$			1.0	$\mu A$
collector-emitter cut-off current	$I_{CEO}$	$V_{CE}=40V, I_B=0$			1.0	$\mu A$
emitter-base cut-off current	$I_{EBO}$	$V_{EB}=4V, I_C=0$			1.0	$\mu A$
DC current gain	$H_{FE}$	$V_{CE}=2V, I_C=50mA$	60		320	
	$H_{FE1}$	$V_{CE}=2V, I_C=1A$	30			
collector-emitter saturation voltage	$V_{CESAT}$	$I_C=0.5A, I_B=50mA$			0.7	V
Base-Emitter Saturation Voltage	$V_{BESAT}$	$I_C=0.5A, I_B=50mA$			1.2	V
Transition frequency	$f_T$	$V_{CE}=10V, I_C=50mA$		150		MHz

## Classification of $H_{FE}$

Rank	D	E	F
Range	60-120	100-200	160-320