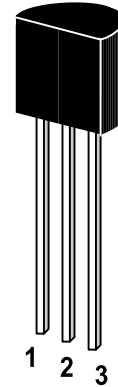


# ST 2SD734

**NPN Silicon Epitaxial Planar Transistor**  
for 1W Output, Electronic Governor, DC-DC Converter Applications.

The transistor is subdivided into four groups D, E, F and G, according to its DC current gain.

On special request, these transistors can be manufactured in different pin configurations.

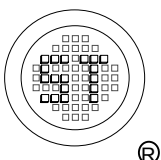


1. Emitter 2. Collector 3. Base

TO-92 Plastic Package  
Weight approx. 0.19g

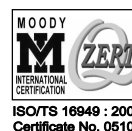
## Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

	Symbol	Value	Unit
Collector Base Voltage	$V_{\text{CBO}}$	25	V
Collector Emitter Voltage	$V_{\text{CEO}}$	20	V
Emitter Base Voltage	$V_{\text{EBO}}$	5	V
Collector Current	$I_{\text{C}}$	700	mA
Collector Current (Pulse)	$I_{\text{CP}}$	1500	mA
Power Dissipation	$P_{\text{tot}}$	600	mW
Junction Temperature	$T_{\text{J}}$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{\text{S}}$	-55 to +150	$^\circ\text{C}$



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



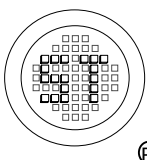
ISO/TS 16949 : 2002 Certificate No. 05103  
ISO 14001:2004 Certificate No. 7116  
ISO 9001:2000 Certificate No. 0506098

Dated : 07/12/2002

# ST 2SD734

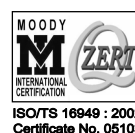
## Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit			
DC Current Gain at $V_{CE}=2\text{V}$ , $I_C=50\text{mA}$	Current Gain Group	D	$h_{FE}$	60	-	120	-	
			E	$h_{FE}$	100	-	200	-
			F	$h_{FE}$	160	-	320	-
			G	$h_{FE}$	280	-	560	-
				$h_{FE}$	50	-	-	-
at $V_{CE}=2\text{V}$ , $I_C=500\text{mA}$								
Collector Cutoff Current at $V_{CB}=20\text{V}$	$I_{CBO}$	-	-	1	$\mu\text{A}$			
Emitter Cutoff Current at $V_{EB}=4\text{V}$	$I_{EBO}$	-	-	1	$\mu\text{A}$			
Gain Bandwidth Product at $V_{CE}=10\text{V}$ , $I_C=50\text{mA}$	$f_T$	-	250	-	MHz			
Output Capacitance at $V_{CB}=10\text{V}$ , $f=1\text{MHz}$	$C_{ob}$	-	8	-	pF			



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



Dated : 07/12/2002