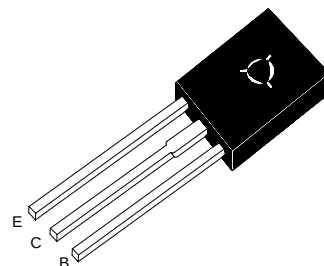


BD135, BD137, BD139

NPN SILICON EPITAXIAL POWER TRANSISTOR

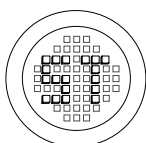
These devices are designed as Audio Amplifier and Drivers Utilizing.



TO-126 Plastic Package

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

Parameter	Symbol	BD135	BD137	BD139	Unit
Collector Emitter Voltage	V_{CEO}	45	60	80	V
Collector Emitter Voltage ($R_{BE}=1K\Omega$)	V_{CER}	45	60	100	V
Collector Base Voltage	V_{CBO}	45	60	100	V
Emitter Base Voltage	V_{EBO}	5			V
Collector Current - Continuous	I_C	1.5			A
Collector Current - Peak ¹⁾	I_{CM}	2			A
Base Current - Continuous	I_B	0.5			A
Total Power Dissipation @ $T_A=25\text{ }^{\circ}\text{C}$ Derate above $25\text{ }^{\circ}\text{C}$	P_D	1.25 10			W mW/ $^{\circ}\text{C}$
Total Power Dissipation @ $T_C=25\text{ }^{\circ}\text{C}$ Derate above $25\text{ }^{\circ}\text{C}$	P_D	12.5 100			W mW/ $^{\circ}\text{C}$
Total Power Dissipation @ $T_C=70\text{ }^{\circ}\text{C}$	P_D	8			W
Operating and Storage Junction Temperature Range	T_J, T_S	-55 to +150			$^{\circ}\text{C}$
Thermal Resistance ,Junction to Ambient	$R_{\theta JA}$	100			$^{\circ}\text{C/W}$
Thermal Resistance ,Junction to Case	$R_{\theta JC}$	10			$^{\circ}\text{C/W}$



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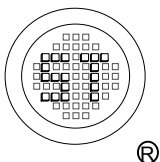
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Эл. почта: info@rct.ru
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BD135, BD137, BD139

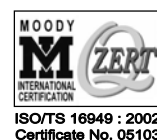
Characteristics at $T_a=25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain				
at $V_{CE}=2V$, $I_C=5mA$	h_{FE}	25	-	-
at $V_{CE}=2V$, $I_C=500mA$	h_{FE}	25	-	-
at $V_{CE}=2V$, $I_C=150mA$	h_{FE}	40	100	-
-6	h_{FE}	63	160	-
-10	h_{FE}	100	250	-
-16	h_{FE}	160	400	-
-25	h_{FE}			
Collector Emitter Sustaining Voltage				
at $I_C=30mA$	$V_{CEO(sus)}$	45	-	V
BD135	$V_{CEO(sus)}$	60	-	V
BD137	$V_{CEO(sus)}$	80	-	V
BD139	$V_{CEO(sus)}$			
Collector Cutoff Current				
at $V_{CB}=30V$	I_{CBO}	-	0.1	μA
at $V_{CB}=30V$, $T_C=125\text{ }^{\circ}\text{C}$	I_{CBO}	-	10	μA
Emitter Cutoff Current				
at $V_{EB}=5V$	I_{EBO}	-	10	μA
Collector Emitter Saturation Voltage				
at $I_C=500mA$, $I_B=50mA$	$V_{CE(sat)}$	-	0.5	V
Base Emitter On Voltage				
at $I_C=500mA$, $V_{CE}=2V$	$V_{BE(on)}$	-	1	V

Pulse Test: Pulse Width=300 μs , Duty Cycle $\leq 2\%$.



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



Dated : 16/11/2005