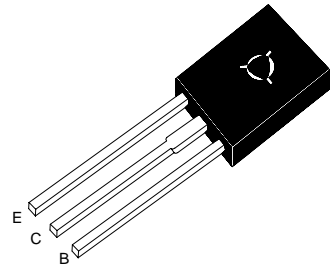


BD135, BD137, BD139

NPN SILICON EPITAXIAL POWER TRANSISTOR

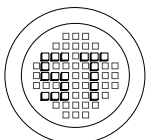
These devices are designed as Audio Amplifier and Drivers Utilizing.



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 Collector Current - Peak ¹⁾	I_C I_{CM}	1.5 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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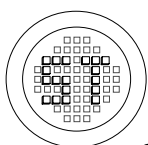
Тел.: (495) 795-0805
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Эл. почта: info@rct.ru
Веб: www.rct.ru

BD135, BD137, BD139

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

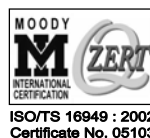
Parameter	Symbol	Min.	Max.	Unit
DC Current Gain				
at $V_{CE}=2\text{V}$, $I_C=5\text{mA}$	h_{FE}	25	-	-
at $V_{CE}=2\text{V}$, $I_C=500\text{mA}$	h_{FE}	25	-	-
at $V_{CE}=2\text{V}$, $I_C=150\text{mA}$	h_{FE}	40	100	-
	h_{FE}	63	160	-
	h_{FE}	100	250	-
	h_{FE}	160	400	-
Collector Emitter Sustaining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