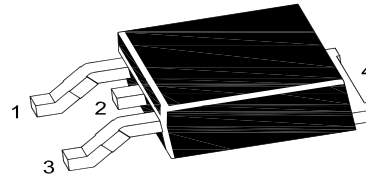


ST 2SD1817R

NPN Silicon Epitaxial Planar Transistor

Motor drivers, hammer drivers and
relay drivers applications



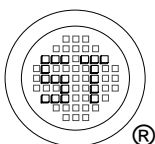
1. Base 2. Collector 3. Emitter 4. Collector
TO-252 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	80	V
Collector Emitter Voltage	V_{CEO}	60	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current	I_C	3	A
Collector Current (Pulse)	I_{CP}	6	A
Collector Dissipation Collector Dissipation @ $T_C = 25\text{ }^\circ\text{C}$	P_C	1 15	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_s	- 55 to + 150	$^\circ\text{C}$

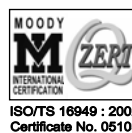
Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $V_{CE} = 2\text{ V}$, $I_C = 1\text{ A}$ at $V_{CE} = 2\text{ V}$, $I_C = 2\text{ A}$	h_{FE} h_{FE}	2000 1000	- -	- -
Collector Base Breakdown Voltage at $I_C = 1\text{ mA}$	$V_{(BR)CBO}$	80	-	V
Collector Emitter Breakdown Voltage at $I_C = 25\text{ mA}$	$V_{(BR)CEO}$	60	-	V
Collector Cutoff Current at $V_{CB} = 60\text{ V}$	I_{CBO}	-	10	μA
Emitter Cutoff Current at $V_{EB} = 5\text{ V}$	I_{EBO}	-	2.5	mA
Collector Emitter Saturation Voltage at $I_C = 2\text{ A}$, $I_B = 4\text{ mA}$	$V_{CE(sat)}$	-	1.5	V
Base Emitter Saturation Voltage at $I_C = 2\text{ A}$, $I_B = 4\text{ mA}$	$V_{BE(sat)}$	-	2	V



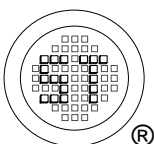
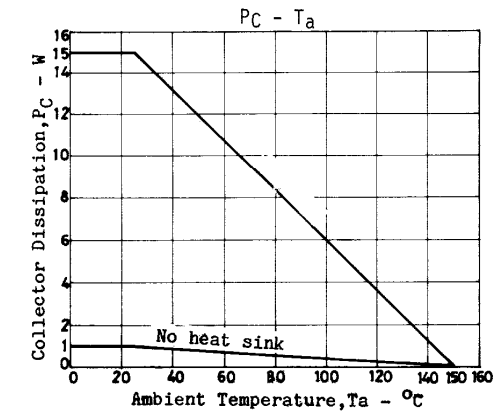
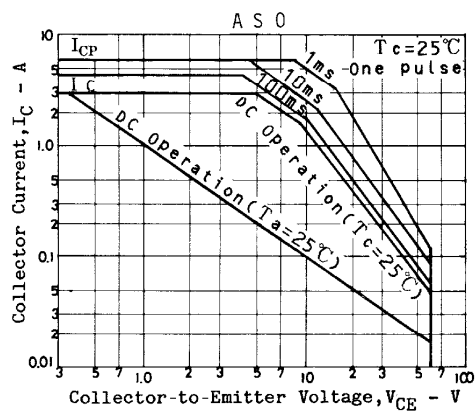
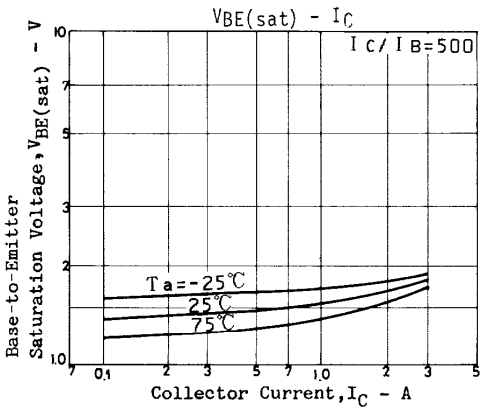
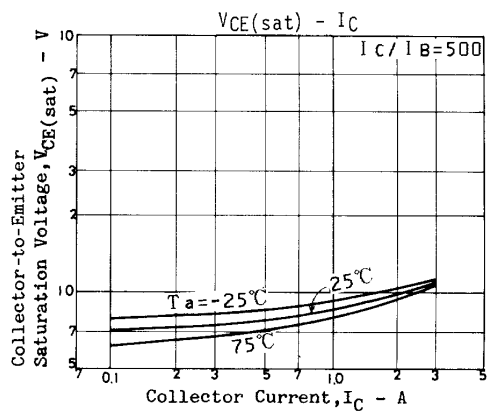
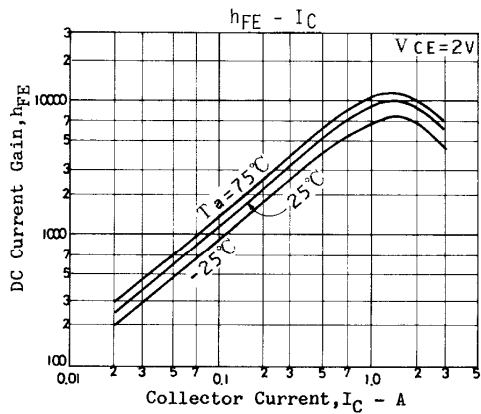
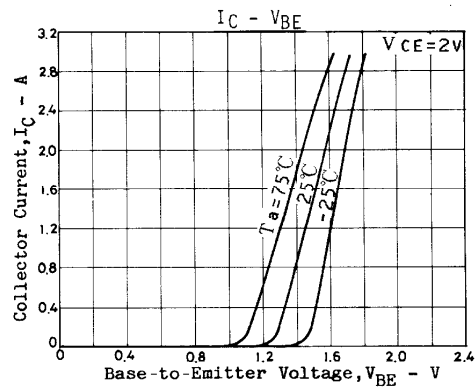
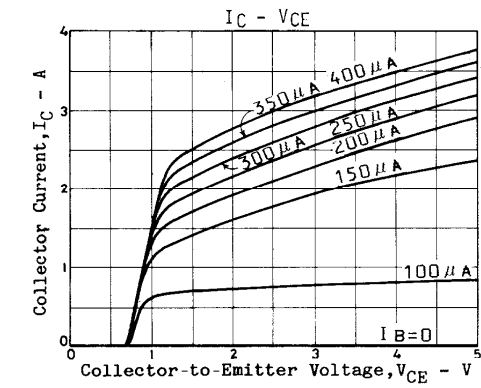
SEMTECH ELECTRONICS LTD.

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



Dated : 10/08/2006

ST 2SD1817R



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ISO/TS 16949 : 2002
 Certificate No. 05103



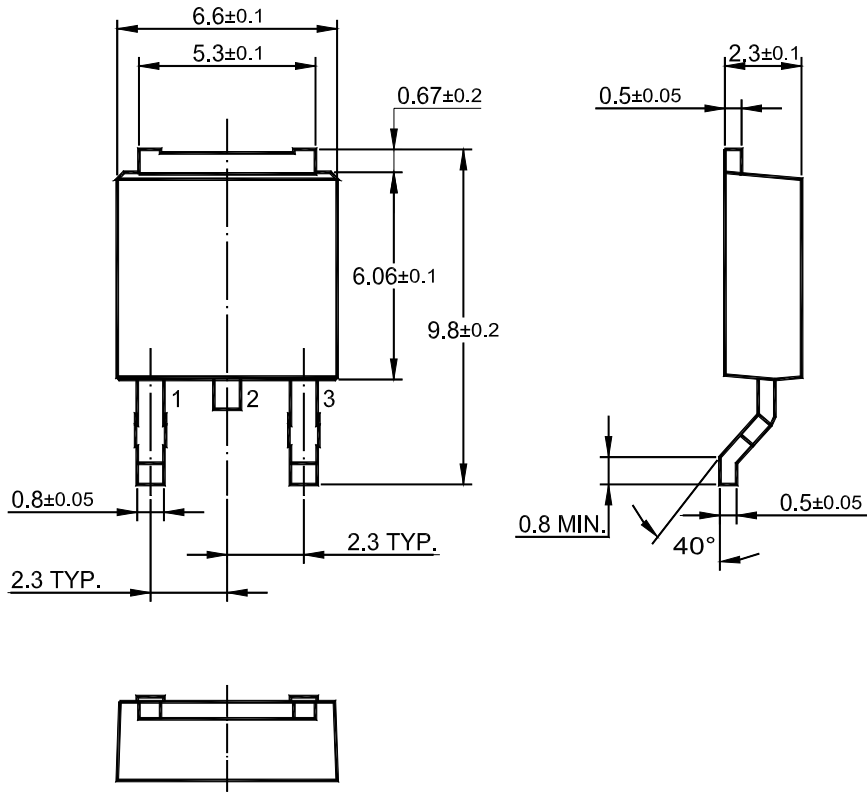
ISO 14001:2004
 Certificate No. 7116



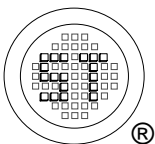
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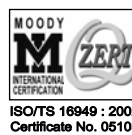
TO-252 PACKAGE OUTLINE



Dimensions in mm



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ISO/TS 16949 : 2002
Certificate No. 05103

ISO 14001:2004
Certificate No. 71116

ISO 9001:2000
Certificate No. 0506098

Dated : 10/08/2006