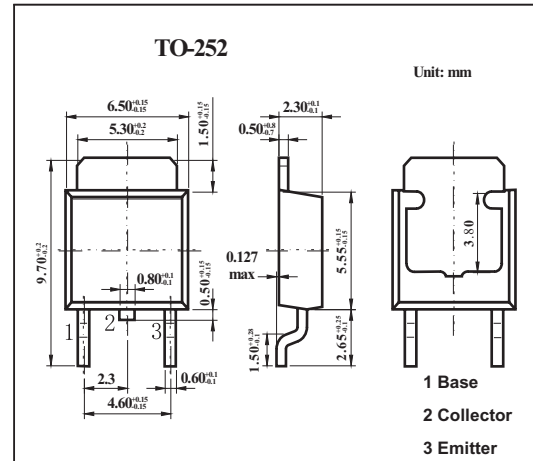


## 2SD1760

### ■ Features

- Low  $V_{CE(sat)}$ ,  $V_{CE(sat)} = 0.5V$  (typical)  
( $I_C = 2A$ ,  $I_B = 0.2A$ ).



### ■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	60	V
Collector-emitter voltage	$V_{CE0}$	50	V
Emitter-base voltage	$V_{EB0}$	5	V
Collector current	$I_C$	3	A
Collector current (pulse) *	$I_{CP}$	4.5	A
Collector power dissipation $T_c = 25^\circ C$	$P_C$	15	W
Junction temperature	$T_j$	150	$^\circ C$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ C$

\*  $P_w=100ms$ .

### ■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base voltage	$BV_{CB0}$	$I_C=50\mu A$	60			V
Collector-emitter voltage	$BV_{CE0}$	$I_C=1mA$	50			V
Emitter-base voltage	$BV_{EB0}$	$I_E=50\mu A$	5			V
Collector cutoff current	$I_{CBO}$	$V_{CB}=40V$			1	$\mu A$
Emitter cutoff current	$I_{EBO}$	$V_{EB}=4V$			1	$\mu A$
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=2A, I_B=0.2A$		0.5	1	V
Forward current transfer ratio	$h_{FE}$	$V_{CE}=3V, I_C=0.5A$	82		390	
Transition frequency	$f_T$	$V_{CE}=5V, I_E=-500mA, f=30MHz$		90		MHz
Output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0A, f=1MHz$		40		pF

### ■ hFE Classification

Rank	P	Q	R
hFE	82~180	120~270	180~390