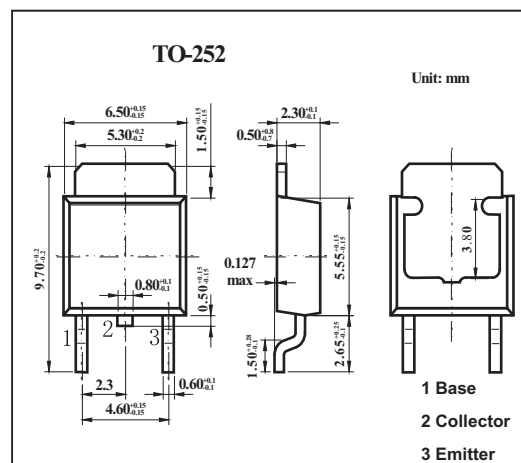


Medium Power Transistor

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	μA
Emitter cutoff current	I_{EBO}	$V_{EB}=4V$			1	μA
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

■ h_{FE} Classification

Rank	P	Q	R
h_{FE}	82~180	120~270	180~390