



NPN Silicon Power Ttransistors

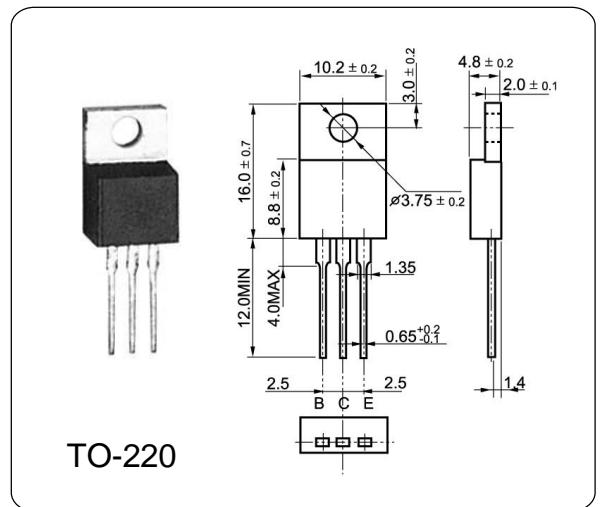
2SD560

DESCRIPTION

The 2SD560 is a mold power transistor developed for lowfrequency power amplifiers and low-speed switching. This transistor is ideal for direct driving from the IC output of devices such as pulse motor drivers and relay drivers, and PC terminals.

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	I	Value	Unit
Collector-Base Voltage	V_{CBO}	150	V
Collector-Emitter Voltage	V_{CEO}	100	V
Emitter-Base Voltage	V_{EBO}	7.0	V
Collector Current	I_C	5.0	A
Base Current	I_B	0.5	A
Total Dissipation at	P_{tot}	30	W
Max. Operating Junction Temperature	T_j	150	°C
Storage Temperature	T_{slg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector Cut-off Current	I_{CBO}	$V_{CB}=100V, I_E=0$	—	—	1.0	uA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=7.0V, I_C=0$	—	—	10	uA
Collector-Emitter Sustaining Voltage	V_{CEO}	$I_C=30mA, I_B=0$	100	—	—	V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=2.0V, I_C=3.0A$	2000	—	15000	
	$h_{FE(2)}$	$V_{CE}=2.0V, I_C=5.0A$	500	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=3.0A, I_B=3.0mA$	—	—	1.5	V
Base Saturation Voltage	$V_{BE(sat)}$	$I_C=3.0A, I_B=3.0mA$	—	—	2.0	V
Current Gain Bandwidth Product	f_T	$V_{CE}=10V, I_C=500mA$	4.0	—	—	MHz
