



### NPN Silicon Power Ttransistors

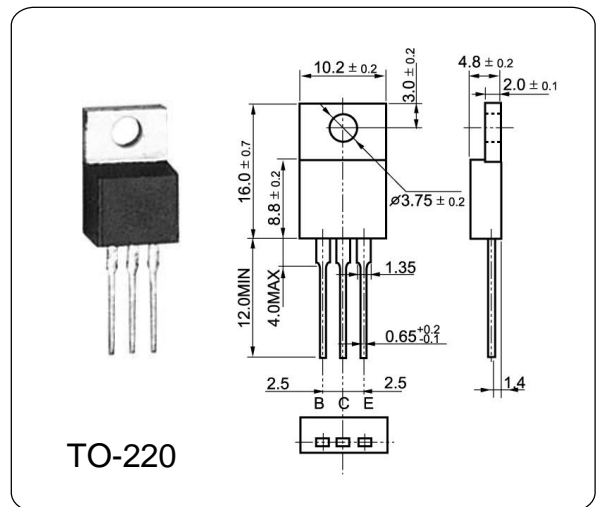
### 2SD560

#### 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

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