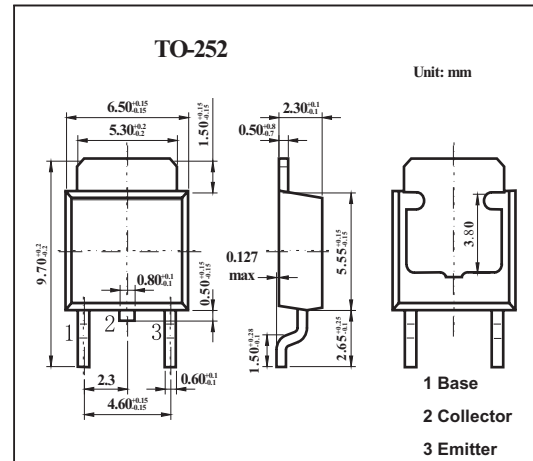


## NPN Silicon Epitaxial Transistor

## 2SC3632-Z

## ■ Features

- High voltage  $V_{CE0}=600V$
- High speed  $t_f < 0.5\mu s$

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	$V_{CBO}$	600	V
Collector to emitter voltage	$V_{CES}$	600	V
Emitter to base voltage	$V_{EBO}$	7	V
Peak collector current *1	$I_{CP}$	2	A
Collector current	$I_C$	1	A
Total power dissipation $T_a = 25^\circ C * 2$	$P_T$	2	W
Junction temperature	$T_j$	150	$^\circ C$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ C$

\*1  $p_w \leq 10ms$ , Duty cycle  $\leq 50\%$

\*2 when mounted on ceramic substrate of  $7.5cm^2 \times 0.7mm$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
collector cutoff current	$I_{CBO}$	$V_{CB}=600V, I_E=0$			10	$\mu A$
Emitter cutoff current	$I_{EBO}$	$V_{EB}=7V, I_C=0$			10	$\mu A$
DC Current Gain	hFE	$V_{CE}=5V, I_C=100mA$	30	55	120	
		$V_{CE}=5V, I_C=100mA$	5	7		
Collector saturation voltage	$V_{CE(sat)}$	$I_C=400mA, I_B=80mA$		0.35	1.0	V
Base to saturation voltage	$V_{BE(sat)}$	$I_C=400mA, I_B=80mA$		0.9	1.2	V
Gain Bandwidth Product	fT	$V_{CE}=5V, I_E=-50mA$		30		MHz
Output capacitance	cob	$V_{CB}=10V, I_E=0A, f=1MHz$		14		pF
Turn-on time	$t_{on}$	$I_C=0.5A, R_L=500\Omega$		0.1	0.5	$\mu s$
Storage time	$t_{stg}$	$I_{B1}=-I_{B2}=0.1A$		4.0	5.0	$\mu s$
Fall time	$t_f$	$V_{CC}=250V$		0.2	0.5	$\mu s$

## ■ hFE Classification

Marking	M	L	K
hFE	30 to 60	40 to 80	60 to 120