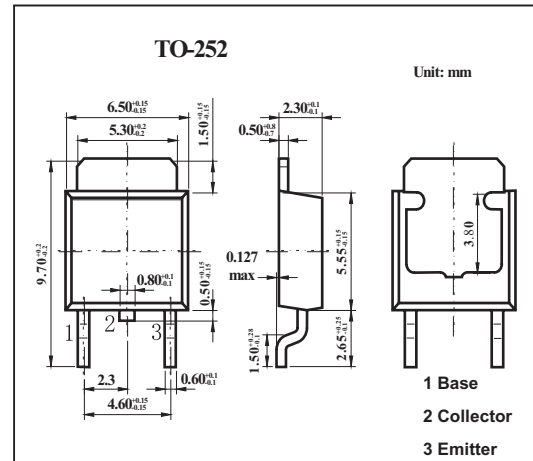


## NPN Silicon Triple Diffused Transistor

## 2SC3588-Z



## ■ Features

- High voltage  $V_{CE0}=400V$

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	$V_{CB0}$	500	V
Collector to emitter voltage	$V_{CES}$	400	V
Emitter to base voltage	$V_{EBO}$	7	V
Peak collector current *1	$I_{CP}$	1	A
Collector current	$I_C$	0.5	A
Total power dissipation $T_c = 25^\circ C$ *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	Testconditons	Min	Typ	Max	Unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=400V, I_E=0$			10	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=5.0V, I_C=0$			10	$\mu A$
DC Current Gain *	$h_{FE}$	$V_{CE}=5V, I_C=50mA$	20	42	80	
		$V_{CE}=5V, I_C=300mA$	10	20		
Collector Saturation Voltage *	$V_{CE(sat)}$	$I_C=300mA, I_B=60mA$		0.2	0.5	V
Base Saturation Voltage *	$V_{BE(sat)}$	$I_C=300mA, I_B=60mA$		0.85	1.0	V
Turn-on Time	$t_{on}$	$I_C=0.3A, R_L=500\Omega, V_{CC}=150V,$ $P_w=50\mu s, I_{B1}=-I_{B2}=0.06A$		0.12	1.0	$\mu s$
Storage Time	$t_{stg}$			2.0	2.5	
Fall Time	$t_r$			0.35	1.0	

\* Pulsed:  $P_w \leq 350\mu A$ , Duty Cycle  $\leq 2\%$

■  $h_{FE}$  Classification

Marking	M	L	K
$h_{FE}$	20 to 40	30 to 60	40 to 80