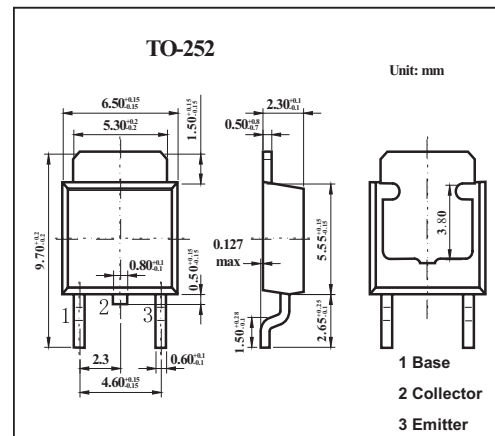


NPN Silicon Triple Diffused Transistor

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	Testconditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=400V, I_E=0$			10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=5.0V, I_C=0$			10	μA
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}	$I_C=0.3A, R_L=500\Omega, V_{CC}=150V,$		0.12	1.0	μs
Storage Time	t_{stg}	$P_W=50\mu s, I_{B1}=-I_{B2}=0.06A$		2.0	2.5	
Fall Time	t_r	Duty Cycle $\leq 2\%$		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