

General Description

The 2SA1952D is PNP silicon power transistor, Designed for general purpose amplifier and low speed switching applications.

Product Summary

VCBO	VCEO	IC
-100V	-60V	-5A

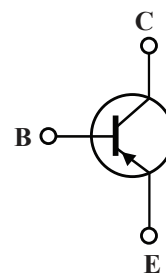
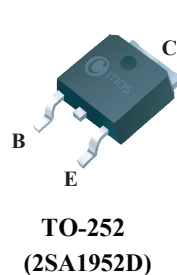
Applications

- Ideal for Medium Power Switching

Features

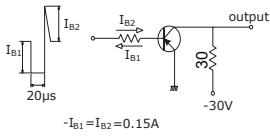
- Epitaxial Planar Die Construction
- Low Collector-Emitter Saturation Voltage
- RoHS Compliant

TO-252 Pin Configuration

Absolute Maximum Ratings($T_a = 25^\circ\text{C}$)

Symbol	Parameter	Rating	Units
V_{CBO}	Collector to Base Voltage	-100	V
V_{CEO}	Collector to Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-5	A
I_{CP}	Collector Current (Pulse)	-10	A
P_C	Collector Dissipation($T_c=25^\circ\text{C}$)	10	W
T_{STG}	Storage Temperature Range	-55 to 150	$^\circ\text{C}$
T_J	Junction Temperature	150	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

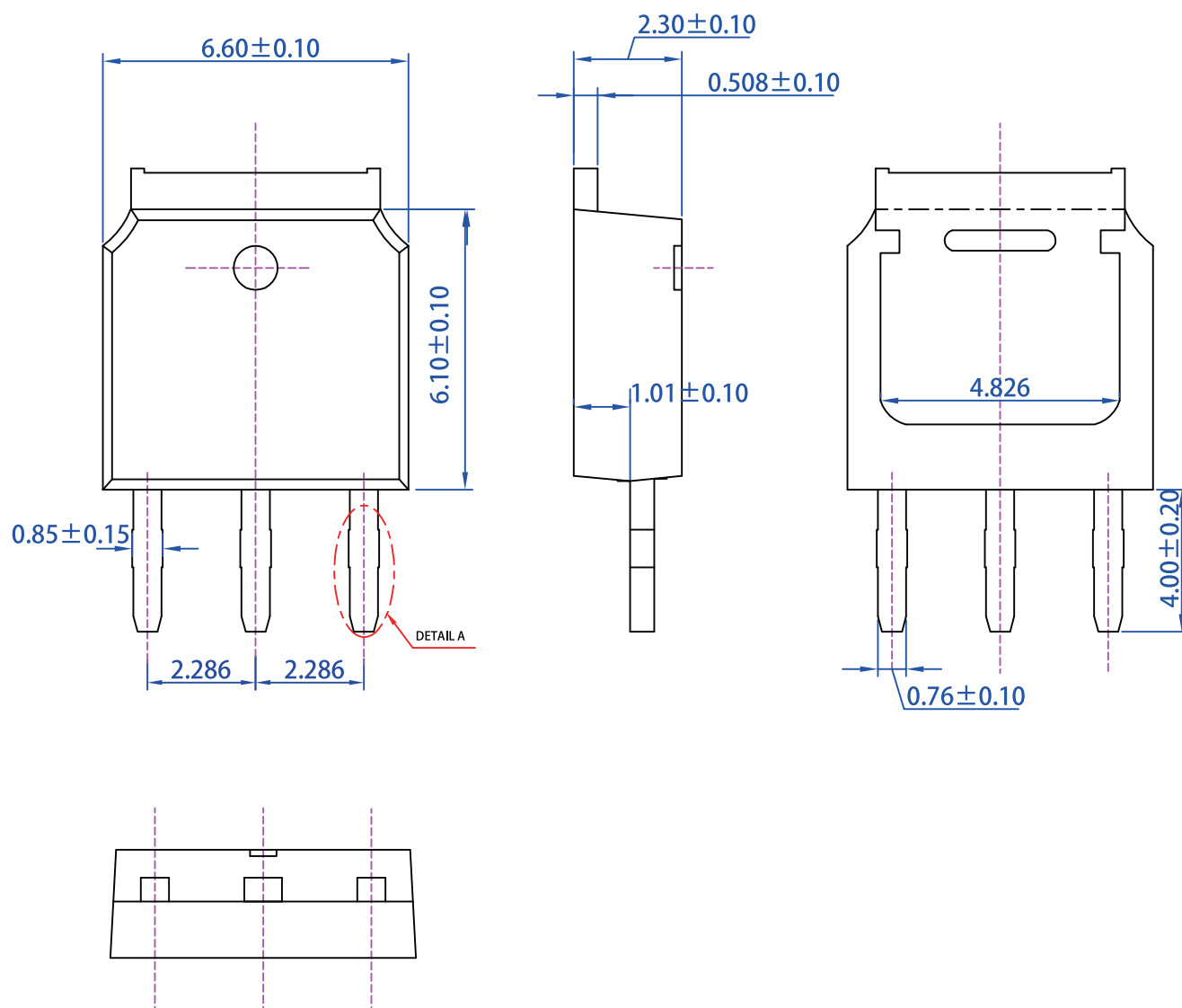
Parameter	Symbol	Conditions	min	typ	max	Unit	
Collector Cutoff Current	ICBO	VCB=-80V, IE=0A			-500	nA	
Emitter Cutoff Current	IEBO	VEB=-5V, IC=0A			-500	nA	
DC Current Gain	hFE	VCE=-2V, IC=-1A	100		300		
		VCE=-2V, IC=-3A	40				
Gain-Bandwidth Product	f T	VCE=-10V, IC=-100mA , f=30MHz		80		MHz	
Output Capacitance	Cob	VCB=-10V, f=1MHz		130		pF	
Collector-to-Emitter Saturation Voltage	VCE(sat)	IC=-2A, IB=-200mA		-0.20	-0.6	V	
Base-to-Emitter Saturation Voltage	VBE(sat)	IC=-4A, IB=-200mA		-1.03	-1.5	V	
Collector-to-Base Breakdown Voltage	V(BR)CBO	IC=-2mA , IE=0A	-100			V	
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	IC=-2mA, RBE=∞	-60			V	
Emitter-to-Base Breakdown Voltage	V(BR)EBO	IE=-100μA, IC=0A	-5			V	
Turn-ON Time	ton	 $-I_{B1}=I_{B2}=0.15A$ Duty cycle $\leq 1\%$			0.3	ns	
Storage Time	tstg					1.5	ns
Fall Time	tf					0.3	ns

This product has been designed and qualified for the consumer market.

Cmos assumes no liability for customers' product design or applications.

Cmos reserves the right to improve product design, functions and reliability without notice. Please refer to the latest version of specification.

Package Dimensions



Note:

1. Tolerance ± 0.15 is not noted, and rounded corners R Max = 0.25 is not marked
2. Mark the unit MM
3. The top pinhole is not allowed to protrude from the plastic sealing surface