

isc Silicon NPN Power Transistor

2SC2792

DESCRIPTION

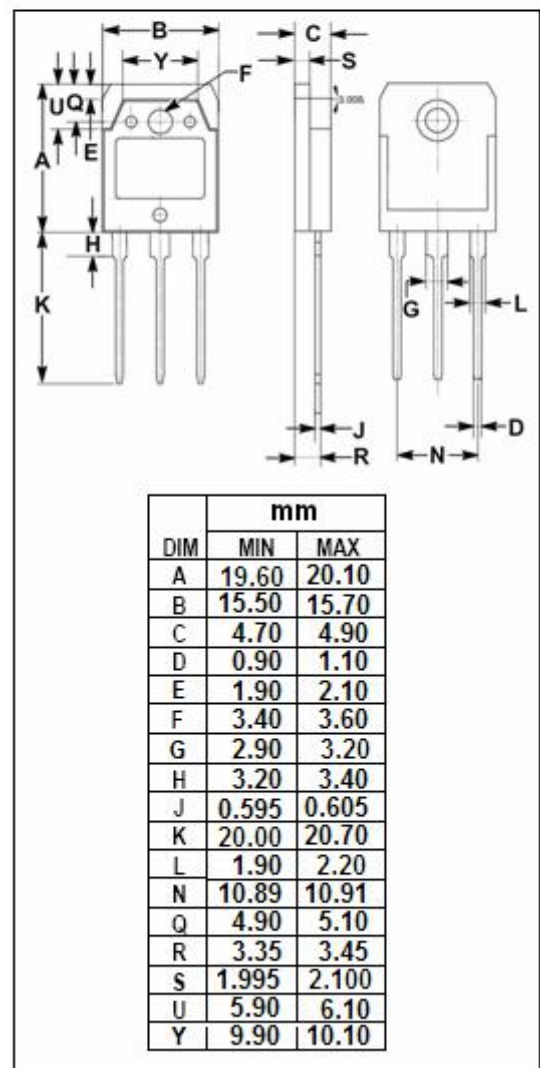
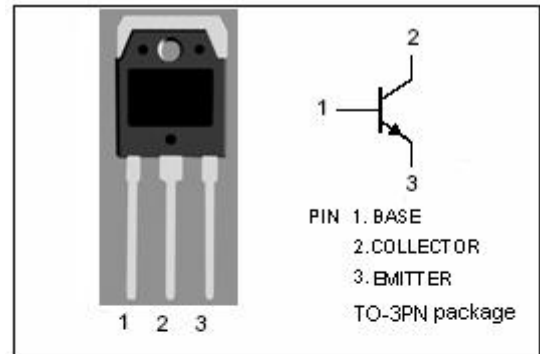
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 800V(\text{Min.})$
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High voltage switching applications
- Switching regulator applications
- High speed DC-DC converter applications

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	850	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	2	A
I_{CM}	Collector Current-Peak	4	A
I_B	Base Current-Continuous	1	A
P_C	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	80	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor
2SC2792
ELECTRICAL CHARACTERISTICS
 $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=10\text{mA}; I_B=0$	800			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C=1\text{mA}; I_E=0$	850			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=0.5\text{A}; I_B=50\text{mA}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=0.5\text{A}; I_B=50\text{mA}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=800\text{V}; I_E=0$			0.1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=7\text{V}; I_C=0$			1.0	mA
h_{FE}	DC Current Gain	$I_C=0.5\text{A}; V_{CE}=5\text{V}$	10			

Switching times

t_r	Rise Time	$I_{B1}=50\text{mA}; I_{B2}=-0.1\text{A}$ $R_L=800\ \Omega; V_{CC}\approx 400\text{V}$ $P_W=20\ \mu\text{s}; \text{Duty}\leq 1\%$			1.0	μs
t_{stg}	Storage Time				4.0	μs
t_f	Fall Time				1.0	μs