

isc Silicon NPN Power Transistor

S2056

DESCRIPTION

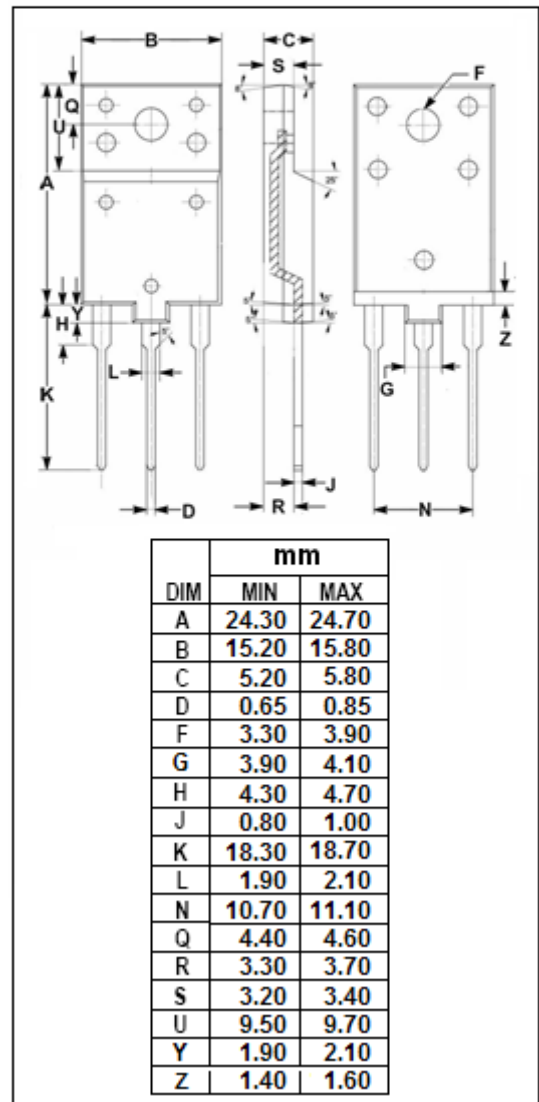
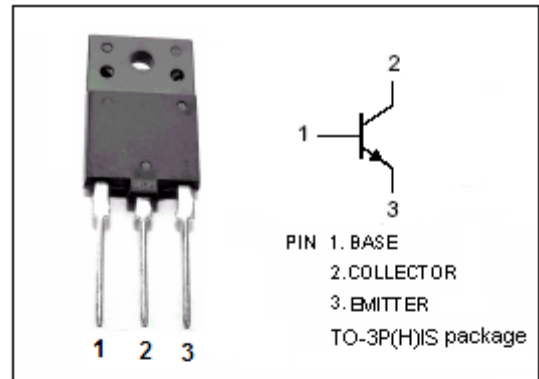
- High Breakdown Voltage-  
:  $V_{CBO}= 1500V$  (Min)
- High Switching Speed

APPLICATIONS

- Designed for TV horizontal output applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CES}$	Collector-Emitter Voltage $V_{BE}= 0$	1500	V
$V_{CER}$	Collector-Emitter Voltage $R_{BE}= 100\Omega$	1500	V
$V_{CEO}$	Collector-Emitter Voltage	700	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current	2.5	A
$I_{CM}$	Collector Current-peak	3	A
$I_B$	Base Current	0.1	A
$P_C$	Collector Power Dissipation @ $T_c \leq 90^{\circ}C$	10	W
$T_J$	Junction Temperature	115	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-65~115	$^{\circ}C$



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## ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=0.1\text{A}$ ; $L=25\text{mH}$	700			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=100\text{mA}$ ; $I_C=0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=2\text{A}$ ; $I_B=1\text{A}$			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=2\text{A}$ ; $I_B=1\text{A}$			1.5	V
$I_{CES}$	Collector Cutoff Current	$V_{CE}=1500\text{V}$ ; $V_{BE}=0$			1.0	mA
$h_{FE}$	DC Current Gain	$I_C=2\text{A}$ ; $V_{CE}=5\text{V}$	2			
$C_{OB}$	Output Capacitance	$I_E=0$ ; $V_{CB}=10\text{V}$ ; $f=1\text{MHz}$		95		pF
$f_T$	Current-Gain—Bandwidth Product	$I_C=0.1\text{A}$ ; $V_{CE}=5\text{V}$		3		MHz
$t_f$	Fall Time	$I_C=2\text{A}$ ; $I_{B(end)}=1\text{A}$		0.75		$\mu\text{s}$