

**SPTECH Silicon NPN Power Transistor**

**2SD1632**

**DESCRIPTION**

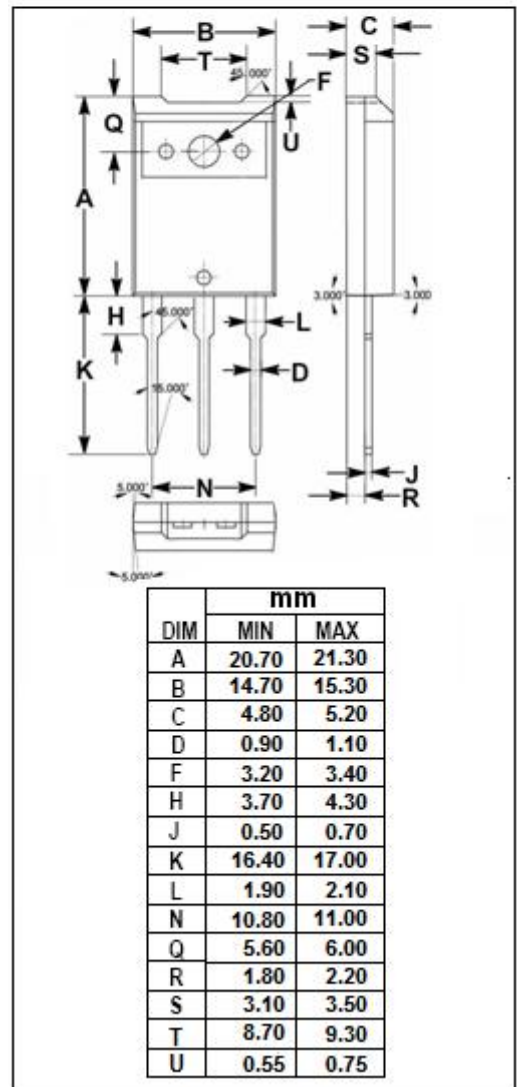
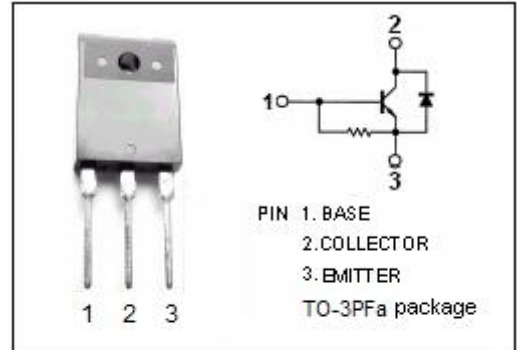
- Collector-Base Breakdown Voltage-  
:  $V_{CBO} = 1300V$  (Min.)
- High Switching Speed
- Built-in Damper Diode

**APPLICATIONS**

- Designed for horizontal deflection output applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector- Base Voltage	1300	V
$V_{CES}$	Collector-Emitter Voltage	1300	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current-Continuous	4	A
$I_{CM}$	Collector Current-Peak	15	A
$I_{BM}$	Base Current-Peak	3.5	A
$P_C$	Collector Power Dissipation @ $T_c=25^\circ C$	70	W
$T_J$	Junction Temperature	130	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~130	$^\circ C$



**ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 200\text{mA}; I_C= 0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 3\text{A}; I_B= 1\text{A}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 3\text{A}; I_B= 1\text{A}$			1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}= 750\text{V}; I_E= 0$ $V_{CB}= 1300\text{V}; I_E= 0$			50 1.0	$\mu\text{A}$ mA
$h_{FE}$	DC Current Gain	$I_C= 3\text{A}; V_{CE}= 10\text{V}$	5		15	
$V_{ECF}$	C-E Diode Forward Voltage	$I_F= 4\text{A}$			2.2	V

Switching times

$t_{stg}$	Storage Time	$I_C= 3\text{A}; I_{B(end)}= 1\text{A}; L_{leak}= 5 \mu\text{H}$			9.0	$\mu\text{s}$
$t_f$	Fall Time				0.8	$\mu\text{s}$