

INCHANGE Semiconductor

isc Product Specification

isc Silicon NPN Power Transistor

KSC5086

DESCRIPTION

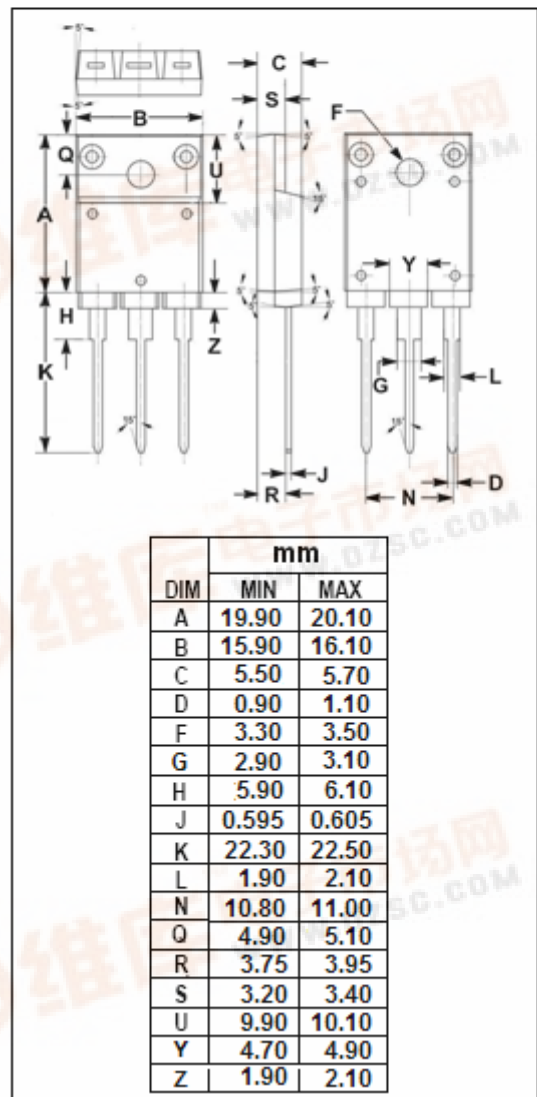
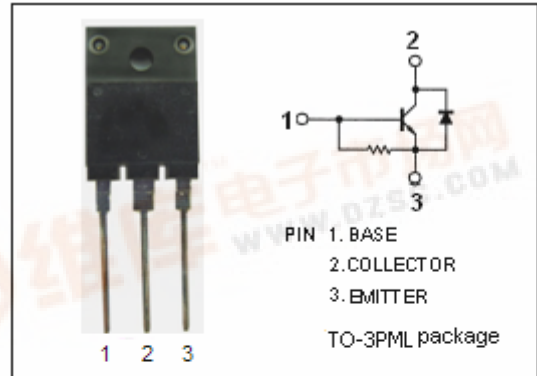
- High Collector-Base Voltage-  
:  $V_{CBO} = 1500V(\text{Min})$
- High Switching Speed
- Built-in Damper Diode

APPLICATIONS

- Designed for use in high definition color display horizontal deflection output application.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	1500	V
$V_{CEO}$	Collector-Emitter Voltage	800	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current-Continuous	7	A
$I_{CM}$	Collector Current-Peak	16	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	50	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



**isc Silicon NPN Power Transistor****KSC5086****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	$I_E= 250\text{mA}; I_C= 0$	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 5\text{A}; I_B= 1.2\text{A}$			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 5\text{A}; I_B= 1.2\text{A}$			1.5	V
$I_{CES}$	Collector Cutoff Current	$V_{CE}= 1400\text{V}; R_{BE}= 0$			1	mA
$I_{CBO}$	Collector Cutoff Current	$V_{CB}= 800\text{V}; I_E= 0$			10	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}= 4\text{V}; I_C=0$	40		200	mA
$h_{FE}$	DC Current Gain	$I_C= 1\text{A}; V_{CE}= 5\text{V}$	8			
$V_{ECF}$	C-E Diode Forward Voltage	$I_F= 6\text{A}$			2.0	V
$t_f$	Fall Time	$I_C= 4\text{A}; I_{B1}= 0.8\text{A}; I_{B2}= -1.6\text{A}; V_{CC}= 200\text{V}; R_L= 50\Omega$			0.2	$\mu\text{s}$