

isc Silicon NPN Power Transistor

2SC5047

DESCRIPTION

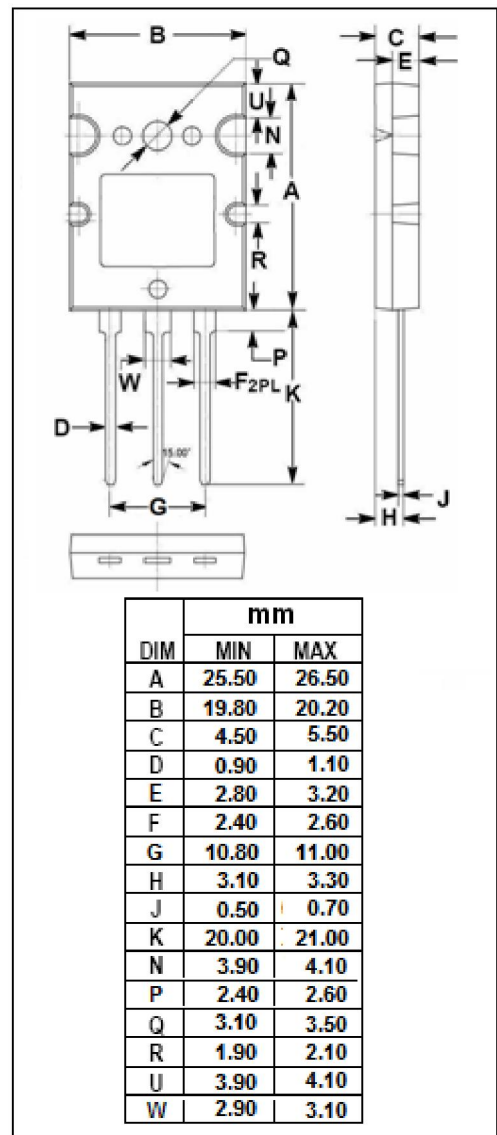
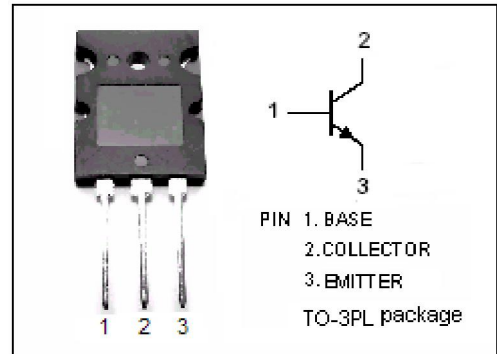
- High Switching Speed
- High Breakdown Voltage-  
:  $V_{(BR)CBO} = 1600V(\text{Min})$

APPLICATIONS

- Designed for horizontal deflection output applications.
- Ultrahigh-Definition CRT Display

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	1600	V
$V_{CEO}$	Collector-Emitter Voltage	800	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current-Continuous	25	A
$I_{CM}$	Collector Current-Pulse	50	A
$P_C$	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	250	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



**isc Silicon NPN Power Transistor****2SC5047****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	$I_C=100\text{mA}; I_B=0$	800			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=20\text{A}; I_B=5\text{A}$			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=20\text{A}; I_B=5\text{A}$			1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=800\text{V}; I_E=0$			10	$\mu\text{A}$
$I_{CES}$	Collector Cutoff Current	$V_{CE}=1600\text{V}; R_{BE}=0$			1.0	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=4\text{V}; I_C=0$			1.0	mA
$h_{FE-1}$	DC Current Gain	$I_C=1\text{A}; V_{CE}=5\text{V}$	15			
$h_{FE-2}$	DC Current Gain	$I_C=20\text{A}; V_{CE}=5\text{V}$	4		7	
$t_{stg}$	Storage Time	$I_C=12\text{A}; I_{B1}=2.4\text{A}; I_{B2}=-6\text{A}$			2.0	$\mu\text{s}$
$t_f$	Fall Time			0.1	0.2	$\mu\text{s}$