

isc Silicon NPN Power Transistor
2SC6017
DESCRIPTION

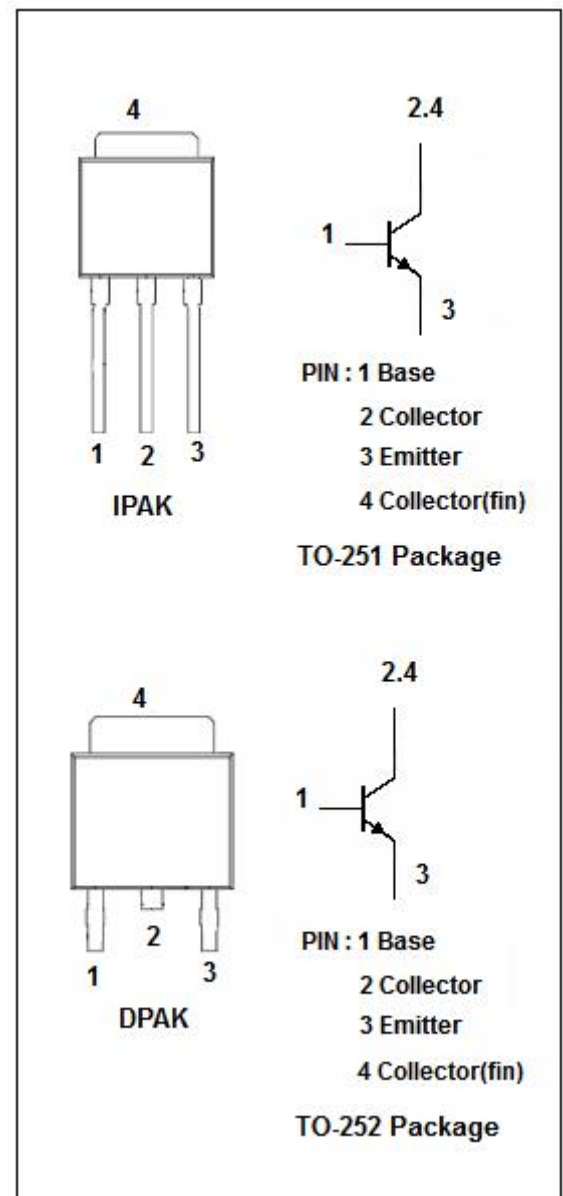
- Large current capacitance
- High-speed switching
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation
- Complementary to 2SA2169

APPLICATIONS

- Relay drivers, lamp drivers, motor drivers

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	10	A
I_{CM}	Collector Current-Peak	13	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}\text{C}$	20	W
	Collector Power Dissipation @ $T_a=25^{\circ}\text{C}$	0.95	
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



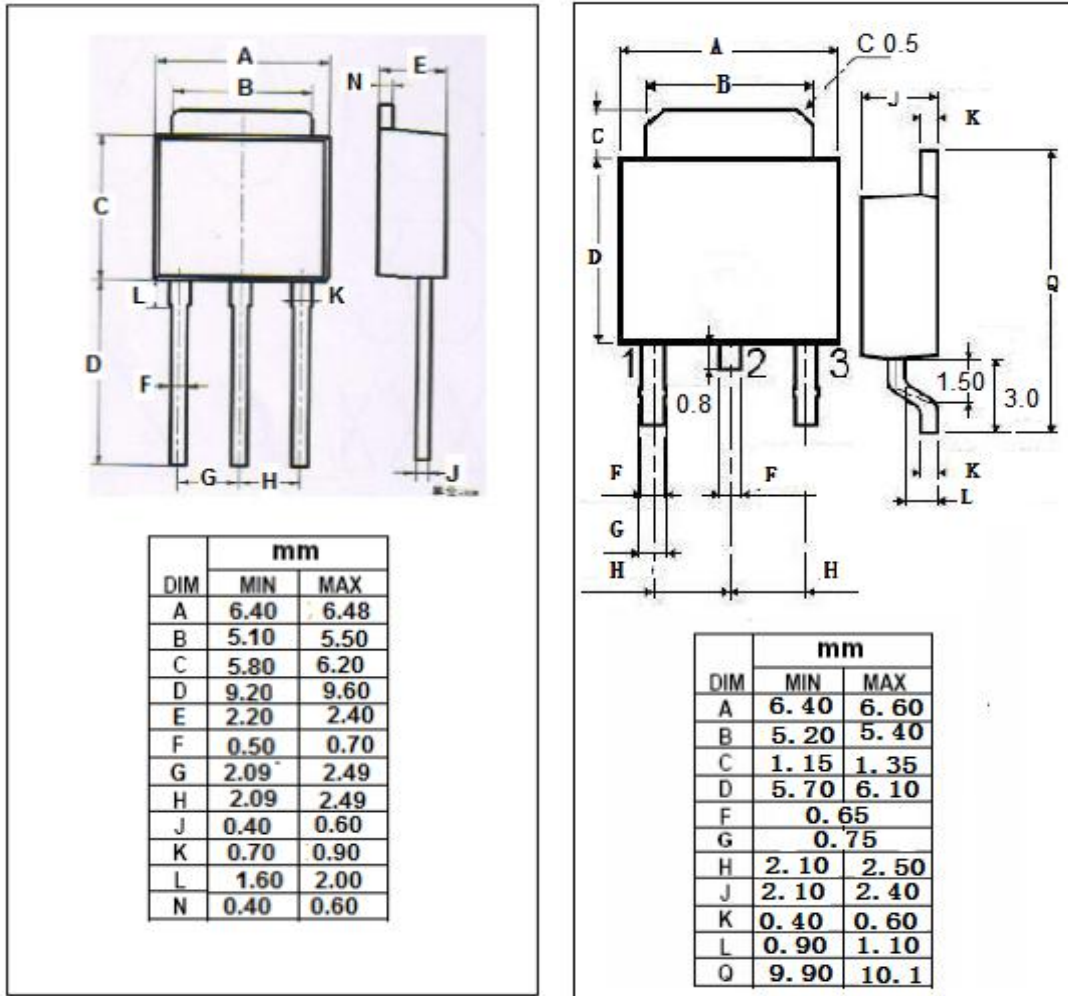
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ELECTRICAL CHARACTERISTICS
 $T_c=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 5A; I_B= 250mA$			0.36	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 5A; I_B= 250mA$			1.4	V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C= 1mA; I_B= 0$	50			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 100\mu A; I_C= 0$	6			V
I_{CBO}	Collector Cutoff Current	$V_{CB}= 40V; I_E= 0$			10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 4V; I_C= 0$			10	μA
h_{FE}	DC Current Gain	$I_C= 1A; V_{CE}= 2V$	200		700	
C_{OB}	Output Capacitance	$I_E= 0; V_{CB}= 10V; f= 1.0MHz$		60		pF
f_T	Current-Gain—Bandwidth Product	$I_C= 1A; V_{CE}= 5V$		200		MHz

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Outline Drawing



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