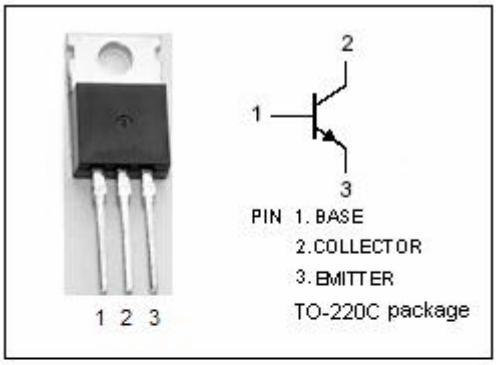
isc Silicon NPN Power Transistors KTD1351

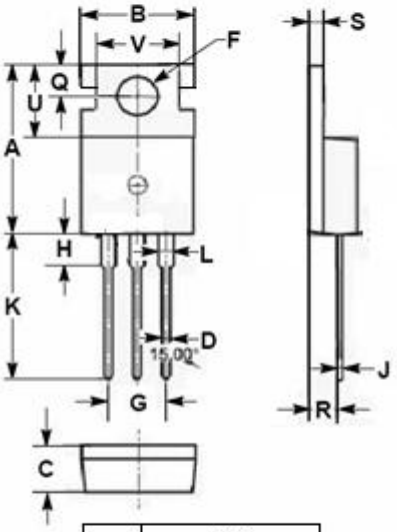


DESCRIPTION

- Low Saturation Voltage-
  : $V_{CE(sat)}$=1.0V(Max)@ (I_C= 2A, I_B=0.2A)
- High Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 60V(Min)
- Complement to Type KTB988
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for general purpose applications.



DIM	mm MIN	mm MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	3	A
I_B	Base Current	0.5	A
P_C	Collector Power Dissipation T_C=25℃	30	W
	Collector Power Dissipation Ta=25℃	2.0	
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 50mA; I_B= 0	60			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 2A; I_B= 0.2A			1.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= 0.5A; V_{CE}= 5V			1.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 60V; I_E= 0			100	uA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7V; I_C= 0			100	uA
h_{FE}	DC Current Gain	I_C= 0.5A ; V_{CE}= 5V	60		300	
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 10V,f_{test}= 1MHz		35		pF
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A ; V_{CE}= 5V		3.0		MHz
Switching times						
t_{on}	Turn-on Time	I_C= 2.0A ,I_{B1}= -I_{B2}= 0.2A		0.65		μs
t_{stg}	Storage Time			1.3		μs
t_f	Fall Time			0.65		μs

◆ h_{FE} Classifications

O	Y	GR
60-120	100-200	150-300

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