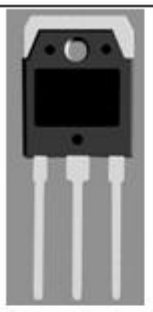
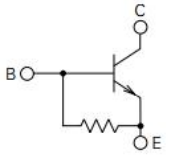
isc Silicon NPN Power Transistor — QM5HG-24





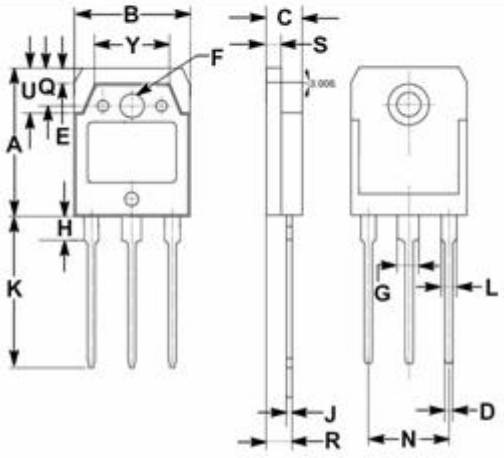
PIN: 1.Base
2.Collector
3.Emitter
TO-3PN Package

DESCRIPTION

- High Power Handling capacity
- High Collector-Base Voltage-
  : V_{CBO}= 1200V(Min)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Base driver for High voltage transistor modules



DIM	mm MIN	mm MAX
A	19.60	20.30
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	19.80	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1200	V
V_{CEX}	Collector-Emitter Voltage	1200	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	5	A
I_B	Base Current-Continuous	2	A
P_C	Collector Power Dissipation @ T_C=25℃	100	W
T_J	Junction Temperature	-40~150	℃
T_{stg}	Storage Temperature Range	-40~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 50mA ; I_B= 0	1200			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 3A; I_B= 0.6A			1	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 3A; I_B= 0.6A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 1200V; I_E= 0			1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 7V; I_C= 0			200	mA
h_{FE}	DC Current Gain	I_C= 3A ; V_{CE}= 1V	5			

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