

DESCRIPTION

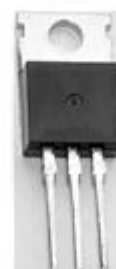
- High transition frequency
- Wide area of safe operation

APPLICATIONS

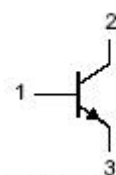
- 27MHz Power Amplifier Applications
- Recommended for output stage application of AM 4W transmitter

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

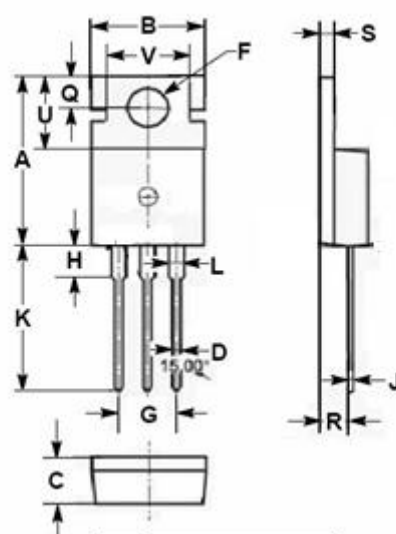
SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CER}	Collector-Emitter Voltage $R_{BE}=150\ \Omega$	80	V
V_{EBO}	Emitter-Base Voltage	4	V
I_C	Collector Current-Continuous	4	A
I_E	Emitter current	4	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}\text{C}$	10	W
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



1 2 3



PIN 1. BASE
2. COLLECTOR
3. EMITTER
TO-220C package



DIM	mm	
	MIN	MAX
A	15.50	15.90
B	9.90	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	13.00	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

SPTECH Silicon NPN Power Transistor**2SC2075****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CER}	Collector-Emitter Breakdown Voltage	I _C =10mA; R _{BE} =500 Ω	80			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E =1mA; I _C = 0	4			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C =3A; I _B = 0.3A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 30V ; I _E = 0			10	μ A
h _{FE-1}	DC Current Gain	I _C = 500mA ; V _{CE} = 5V	25			
h _{FE-2}	DC Current Gain	I _C = 3A ; V _{CE} =2V	15			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} = 1MHz		40		pF
f _T	Current-Gain—Bandwidth Product	I _C = 500mA; V _{CE} =5V		100		MHz
P _O	Output Power	V _{CC} = 12V; P _{in} =0.3W, f=27MHz	3.5			W