

SPTECH Silicon NPN Power Transistor**2SC2238****DESCRIPTION**

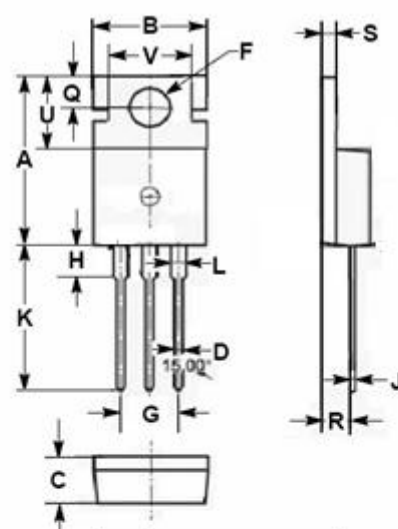
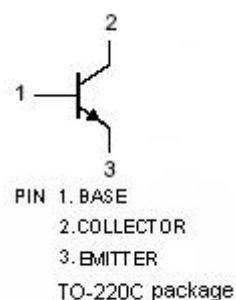
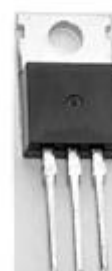
- Collector-Emitter Breakdown Voltage
: $V_{(BR)CEO}=160V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SA968

APPLICATIONS

- Power amplifier applications
- Driver stage amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	160	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	1.5	A
I_E	Emitter Current- Continuous	-1.5	A
P_C	Total Power Dissipation @ $T_C=25^\circ\text{C}$	25	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



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**2SC2238****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C =10mA ; I _B = 0	160			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E =1mA ; I _C = 0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 0.5A; I _B = 50mA			1.5	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} = 160V ; I _E = 0			1.0	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} =5V; I _C = 0			1.0	μ A
h _{FE}	DC Current Gain	I _C =0.1A ; V _{CE} =5V	70		240	
C _{OB}	Output Capacitance	I _E = 0; V _{CB} =10V; f _{test} = 1MHz		25		pF
f _T	Current-Gain—Bandwidth Product	I _C =0.1A;V _{CE} =10V		100		MHz

◆ **h_{FE} Classifications**

O	Y
70-140	120-240