

isc Silicon PNP Power Transistor

DESCRIPTION

- · Collector-Emitter Breakdown Voltage-
 - : V_{(BR)CEO}= -80V(Min)
- · Low Collector Saturation Voltage-
 - : $V_{CE(sat)} = -0.5V(Max)@ (I_C = -3A, I_B = -0.3A)$
- Complement to Type 2SD2202
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

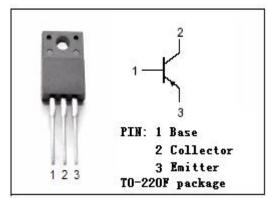


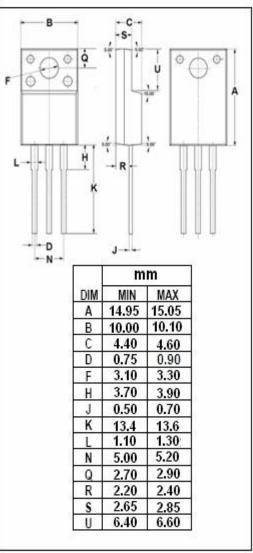
APPLICATIONS

· Designed for high-current switching applications.



SYMBOL	PARAMETER	VALUE	UNIT	
Vсво	Collector-Base Voltage	-90	V	
V _{CEO}	Collector-Emitter Voltage	-80	V	
V _{EBO}	Emitter-Base Voltage	-6	V	
Ic	Collector Current-Continuous	-5	А	
I _{CM}	Collector Current-Pulse	-9	А	
	Collector Power Dissipation @T _a =25°C	2	W	
Pc	Collector Power Dissipation @T _C =25°C	25		
TJ	Junction Temperature 1		$^{\circ}$ C	
T _{stg}	Storage Temperature	-55~150	°C	







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2SB1454

ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

Tj=25°C unless otherwise specified							
PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT		
Collector-Emitter Breakdown Voltage	I _C = -1mA; R _{BE} = ∞	-80			V		
Collector-Base Breakdown Voltage	I _C = -1mA; I _E = 0	-90			V		
Emitter-Base Breakdown Voltage	I _E = -1mA; I _C = 0	-6			V		
Collector-Emitter Saturation Voltage	I _C = -3A; I _B = -0.3A			-0.5	V		
Collector Cutoff Current	V _{CB} = -80V; I _E = 0			-100	μА		
Emitter Cutoff Current	V _{EB} = -4V; I _C = 0			-100	μА		
DC Current Gain	Ic= -1A; Vc== -2V	70		280			
DC Current Gain	I _C = -3A; V _{CE} = -2V	30					
Current-Gain—Bandwidth Product	I _C = -1A; V _{CE} = -5V		20		MHz		
Switching Times							
Turn-on Time			0.2		μ S		
Storage Time	$V_{CC}=$ -50V, $R_L=$ 25 Ω , $I_C=$ -2A; $I_{B1}=$ - $I_{B2}=$ -0.2A,		0.7		μ S		
Fall Time			0.2		μS		
	PARAMETER Collector-Emitter Breakdown Voltage Collector-Base Breakdown Voltage Emitter-Base Breakdown Voltage Collector-Emitter Saturation Voltage Collector Cutoff Current Emitter Cutoff Current DC Current Gain DC Current Gain Current-Gain—Bandwidth Product mes Turn-on Time Storage Time	PARAMETER CONDITIONS Collector-Emitter Breakdown Voltage I_{c} = -1mA; I_{e} = 0 Collector-Base Breakdown Voltage I_{c} = -1mA; I_{c} = 0 Emitter-Base Breakdown Voltage I_{c} = -3A; I_{b} = -0.3A Collector-Emitter Saturation Voltage I_{c} = -3A; I_{b} = -0.3A Collector Cutoff Current V_{c} = -80V; I_{e} = 0 Emitter Cutoff Current V_{c} = -4V; I_{c} = 0 DC Current Gain I_{c} = -1A; V_{c} = -2V DC Current Gain I_{c} = -3A; V_{c} = -2V Current-Gain—Bandwidth Product I_{c} = -1A; V_{c} = -5V mes Turn-on Time Storage Time V_{c} = -50V, V_{c} = 25 Ω, V_{c} = -0.2A, V_{c}	PARAMETER CONDITIONS MIN Collector-Emitter Breakdown Voltage I_{c} = -1mA; I_{E} = 0 -80 Collector-Base Breakdown Voltage I_{c} = -1mA; I_{c} = 0 -90 Emitter-Base Breakdown Voltage I_{c} = -1mA; I_{c} = 0 -6 Collector-Emitter Saturation Voltage I_{c} = -3A; I_{e} = -0.3A -6 Collector Cutoff Current V_{c} = -80V; I_{e} = 0 -80 Emitter Cutoff Current V_{c} = -80V; I_{c} = 0 -70 DC Current Gain I_{c} = -1A; V_{c} = -2V 70 DC Current Gain I_{c} = -3A; V_{c} = -2V 30 Current-Gain—Bandwidth Product I_{c} = -1A; V_{c} = -5V mes I_{c} = -1A; I_{c} = -5V, I_{c} = -5V Turn-on Time I_{c} = -2A; I_{e} = -1B2= -0.2A, I_{c} = -2A; I_{e} = -0.2A,	PARAMETER CONDITIONS MIN TYP. Collector-Emitter Breakdown Voltage I_{c} = -1mA; R_{BE} = ∞ -80 Collector-Base Breakdown Voltage I_{c} = -1mA; I_{c} = 0 -90 Emitter-Base Breakdown Voltage I_{e} = -1mA; I_{c} = 0 -6 Collector-Emitter Saturation Voltage I_{c} = -3A; I_{B} = -0.3A -6 Collector Cutoff Current V_{cB} = -80V; I_{c} = 0 -70 Emitter Cutoff Current V_{cB} = -4V; V_{cB} = -2V 70 DC Current Gain I_{c} = -1A; V_{cE} = -2V 30 DC Current Gain—Bandwidth Product I_{c} = -1A; V_{cE} = -5V 20 mes I_{c} = -50V, I_{c} = -5V, I_{c} = -0.2A, I_{c} = -0.2	PARAMETER CONDITIONS MIN TYP. MAX Collector-Emitter Breakdown Voltage I_{c} = -1mA; I_{c} = 0 -80 -80 Collector-Base Breakdown Voltage I_{c} = -1mA; I_{c} = 0 -90 Emitter-Base Breakdown Voltage I_{c} = -1mA; I_{c} = 0 -6 Collector-Emitter Saturation Voltage I_{c} = -3A; I_{b} = -0.3A -0.5 Collector Cutoff Current V_{c} = -80V; I_{c} = 0 -100 Emitter Cutoff Current V_{c} = -4V; I_{c} = 0 -100 DC Current Gain I_{c} = -1A; V_{c} = -2V 70 280 DC Current Gain I_{c} = -3A; V_{c} = -2V 30 -20 Current-Gain—Bandwidth Product I_{c} = -1A; V_{c} = -5V 20 mes I_{c} = -2A; I_{b} = - I_{b} = -0.2A, I_{b} = -1 I_{b} = -0.2A, I_{b} = -0.2A, I_{c} = -0.2A, $I_$		

♦ h_{FE-1} Classifications

Q	R	S
70-140	100-200	140-280



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