

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Power Switching Applications

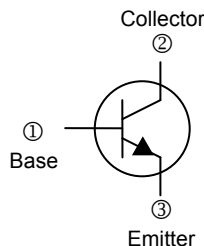
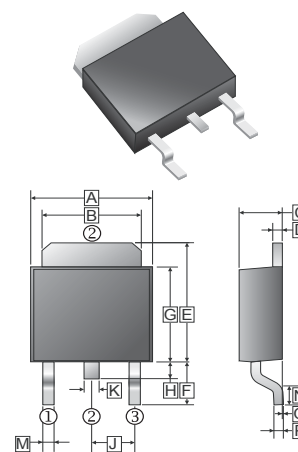
CLASSIFICATION OF t_s

Rank	A1	A2	B1	B2
Range	2~2.5(μ s)	2.5~3(μ s)	3~3.5(μ s)	3.5~4(μ s)

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-252	2.5K	13 inch

TO-252



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.35	6.80	J	2.30	REF.
B	4.95	5.50	K	0.64	1.14
C	2.15	2.40	M	0.50	0.95
D	0.43	0.9	N	1.3	1.8
E	6.4	7.5	O	0	0.15
F	2.40	3.0	P	0.58	REF.
G	5.40	6.25			
H	0.60	1.20			

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	700	V
Collector to Emitter Voltage	V_{CEO}	400	V
Emitter to Base Voltage	V_{EBO}	9	V
Collector Current - Continuous	I_C	1.5	A
Collector Power Dissipation	P_C	1.25	W
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	700	-	-	V	$I_C=1\text{mA}, I_E=0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	400	-	-	V	$I_C=10\text{mA}, I_B=0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	9	-	-	V	$I_E=1\text{mA}, I_C=0$
Collector Cut - Off Current	I_{CBO}	-	-	1	mA	$V_{CB}=700\text{V}, I_E=0$
Collector Cut - Off Current	I_{CEO}	-	-	0.5	mA	$V_{CE}=400\text{V}, I_B=0$
Emitter Cut - Off Current	I_{EBO}	-	-	1	mA	$V_{EB}=9\text{V}, I_C=0$
DC Current Gain	$h_{FE(1)}$	20	-	30		$V_{CE}=5\text{V}, I_C=0.5\text{A}$
	$h_{FE(2)}$	5	-	-		$V_{CE}=5\text{V}, I_C=1.5\text{A}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.6	V	$I_C=1\text{A}, I_B=250\text{mA}$
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	1.2	V	$I_C=1\text{A}, I_B=250\text{mA}$
Base-emitter voltage	V_{BE}	-	-	3	V	$I_E=2\text{A}$
Transition Frequency	f_T	-	5	-	MHz	$V_{CE}=10\text{V}, I_C=100\text{mA}, f=1\text{MHz}$
Fall time	t_f	-	0.5	-	μs	$I_C=1\text{A}, I_{B1}=-I_{B2}=0.2\text{A}, V_{CC}=100\text{V}$
Storage time	t_s	2	-	4	μs	$I_C=250\text{mA}$

CHARACTERISTIC CURVE

