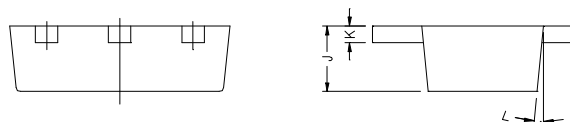
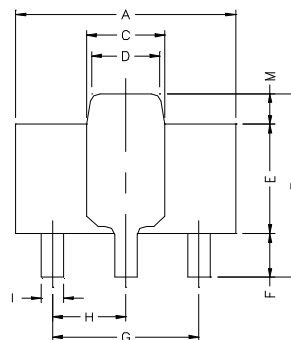


RoHS Compliant Product

SOT-89



Features

Designed for general purpose application requiring high breakdown voltage.



- 1.BASE
- 2.COLLECTOR
- 3.EMITTER

Marking:5401
XXXX
(xxxx = Date Code)

REF.	Min.	Max.	REF.	Min.	Max.
A	4.4	4.6	G	3.00	REF.
B	4.05	4.25	H	1.50	REF.
C	1.50	1.70	I	0.40	0.52
D	1.30	1.50	J	1.40	1.60
E	2.40	2.60	K	0.35	0.41
F	0.89	1.20	L	5° TYP.	
			M	0.70 REF.	

ABSOLUTE MAXIMUM RATINGS (Tamb=25°C, unless otherwise specified)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-160	V
Collector-Emitter Voltage	V_{CEO}	-150	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-600	mA
Total Power Dissipation	P_D	1	W
Operating Junction and Storage Temperature	T_J, T_{STG}	+150, -55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (Tamb=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{CBO}	-160	-	-	V	$I_C = -100\mu A, I_E = 0$
Collector-Emitter Breakdown Voltage	BV_{CEO}	-150	-	-	V	$I_C = -1mA, I_B = 0$
Emitter-Base Breakdown Voltage	BV_{EBO}	-5	-	-	V	$I_E = -10\mu A, I_C = 0$
Collector Cut-off Current	I_{CBO}	-	-	-50	nA	$V_{CB} = -120V, I_E = 0$
Emitter Cut-off Current	I_{EBO}	-	-	-50	nA	$V_{EB} = -5V, I_C = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)1}$	-	-	-200	mV	$I_C = -10mA, I_B = -1mA$
	$V_{CE(sat)2}$	-	-	-500	mV	$I_C = -50mA, I_B = -5mA$
Output Capacitance	C_{ob}	-	-	6	pF	$V_{CB} = -10V, f = 1MHz$
Base-Emitter Voltage	$V_{BE(sat)1}$	-	-	-1	V	$I_C = -10mA, I_B = -1mA$
	$V_{BE(sat)2}$	-	-	-1	V	$I_C = -50mA, I_B = -5mA$
DC Current Gain	h_{FE1}	50	-	-		$V_{CE} = -5V, I_C = -1mA$
	h_{FE2}	60	-	240		$V_{CE} = -5V, I_C = -10mA$
	h_{FE3}	50	-	-		$V_{CE} = -5V, I_C = -50mA$
Transition Frequency	f_T	100	-	-	MHz	$V_{CE} = -10V, I_C = -10mA, f = 100MHz$

Characteristics Curve

