

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

## FEATURES

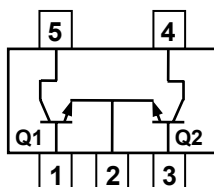
- Small package (dual type)
- High voltage and high current
- High  $h_{FE}$ , Excellent  $h_{FE}$  linearity

## PACKAGING INFORMATION

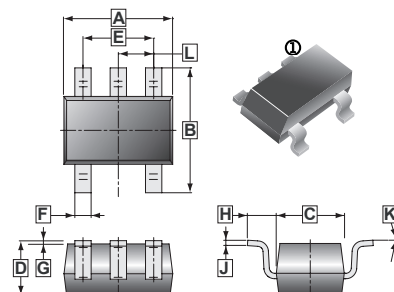
Weight: 0.0081g (approximate)

## MARKING CODE

LY LGR



## SOT-353



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.00	2.20	G	0.100 REF.	
B	2.15	2.45	H	0.525 REF.	
C	1.15	1.35	J	0.08	0.15
D	0.90	1.10	K	8°	
E	1.20	1.40	L	0.650 TYP.	
F	0.15	0.35			

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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector to Base Voltage	$V_{CBO}$	60	V
Collector to Emitter Voltage	$V_{CEO}$	50	V
Emitter to Base Voltage	$V_{EBO}$	5	V
Collector Current – Continuous	$I_C$	0.15	A
Collector Power Dissipation	$P_C$	0.20	W
Junction, Storage Temperature	$T_J, T_{STG}$	+150, -55 ~ +150	$^\circ\text{C}$

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

PARAMETER	TEST CONDITIONS	SYMBOL	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	$I_C = 100 \mu\text{A}, I_E = 0$	$V_{(BR)CBO}$	60	-	-	V
Collector-Emitter Breakdown Voltage	$I_C = 1 \text{ mA}, I_B = 0$	$V_{(BR)CEO}$	50	-	-	V
Emitter-Base Breakdown Voltage	$I_E = 100 \mu\text{A}, I_C = 0$	$V_{(BR)EBO}$	5	-	-	V
Collector Cutoff Current	$V_{CB} = 60 \text{ V}, I_E = 0$	$I_{CBO}$	-	-	0.1	$\mu\text{A}$
Emitter Cutoff Current	$V_{EB} = 5 \text{ V}, I_C = 0$	$I_{EBO}$	-	-	0.1	$\mu\text{A}$
Collector-Emitter Saturation Voltage	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$	$V_{CE(sat)}$	-	-	0.25	V
DC Current Transfer Ratio	$V_{CE} = 6 \text{ V}, I_C = 2 \text{ mA}$	$h_{FE}$	120	-	400	
Transition Frequency	$V_{CE} = 10 \text{ V}, I_C = 1 \text{ mA}$	$f_T$	80	-	-	MHz
Output Capacitance	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$	$C_{OB}$	-	-	3.5	pF

## CLASSIFICATION OF $h_{FE}$

Marking	LY	LGR
Rank	Y	GR
Range	120 - 240	200 - 400

**CHARACTERISTIC CURVES**

