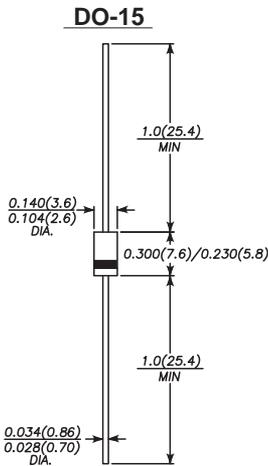


# E153 THRU E603

## CURRENT REGULATOR DIODES

Pinch-off Current - 15 to 60 milliampere



Dimensions in inches and (millimeters)

### FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals

### MECHANICAL DATA

**Case:** JEDEC DO-15 molded plastic body

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.014 ounce, 0.40 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	E153	E183	E203	E253	E353	E603	UNITS
Regulator current at specified test	$I_P$	15	18	20	25	35	60	mA
Knee impedance test voltage at $I=0.8I_P$	$V_K$	3.0						VOLTS
Peak operating voltage	$V_{BO}$	100.0						VOLTS
A 90Hz signal $V_K$ with RMS value equal to 10% of test voltage, $V_K$ , is superimposed on $V_K$ . $R_K=V_K/I_K$	$R_{DK}$	10 to 300						Ohm
DC power	$P_{tot}$	1.0						Watt
Operating junction and storage temperature range	$T_J, T_{STG}$	-50 to +150						°C
Typical temperature coefficient	TC	-0.20_-0.15	-0.20_-0.15	-0.23_-0.35	-0.25_-0.45	-0.25_-0.45	-0.25_-0.45	%/°C

**Note:** 1. Field-effect current regulator diodes are circuit elements that provide a current essentially independent of voltage. These diodes are especially designed for maximum impedance over the operating range. These devices may be used in parallel to obtain higher currents.

2.  $I_P$  range of E562: 5.00~ 6.50mA.

3. Generally  $I_P$  indicate  $\pm 10\%$  tolerance ; suffix "A" indicate  $\pm 5\%$  tolerance.