



CHENMKO ENTERPRISE CO.,LTD

**BA157PT
THRU
BA159PT**

Lead free devices

FAST RECOVERY RECTIFIER

VOLTAGE RANGE 400 - 1000 Volts CURRENT 1.0 Ampere

FEATURES

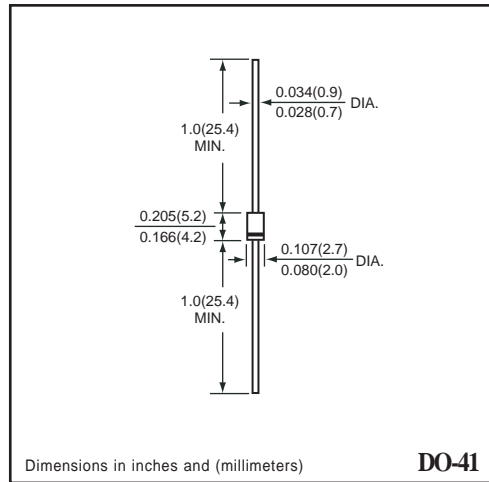
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Fast Recovery Diodes
- * Diffused junction
- * High current capability

MECHANICAL DATA

Case: JEDEC DO-41 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.33 gram



DO-41



DO-41

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	BA157PT	BA158PT	BA159PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	400	600	1000	Volts
Maximum RMS Voltage	V _{RMS}	280	420	700	Volts
Maximum DC Blocking Voltage	V _{DC}	400	600	1000	Volts
Maximum Average Forward Rectified Current at Ambient Temperature = 50°C	I _O	1.0			Amps
Recurrent peak forward current	I _{FRM}	9			Amps
10 mm. peak forward surge current	I _{FSM}	35			Amps
Maximum Operating Temperature Range	T _J	+ 150°C			°C
Storage Temperature Range	T _{STG}	-65 to +150			°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	BA157PT	BA158PT	BA159PT	UNITS
Maximum Instantaneous Forward Voltage at 1.0 A DC	V _F	1.3			Volts
Reverse current at V _{RRM} at TA = 25°C	I _R	5.0			uAmps
Maximum Reverse Recovery Time (NOTE)	t _{rr}	150		250	nS
Capacitance at 1MHZ and V _{RRM}	C _d	2.2	2.0	1.8	pF
Maximum Thermal Resistance (l = 10 mm)	R θ _{JA}	60			°C / W

NOTES : Test Conditions : I_F = 0.5 A, I_R = -1.0 A, I_{RR} = -0.25 A

RATING CHARACTERISTIC CURVES (BA157PT THRU BA159PT)

FIG. 1 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

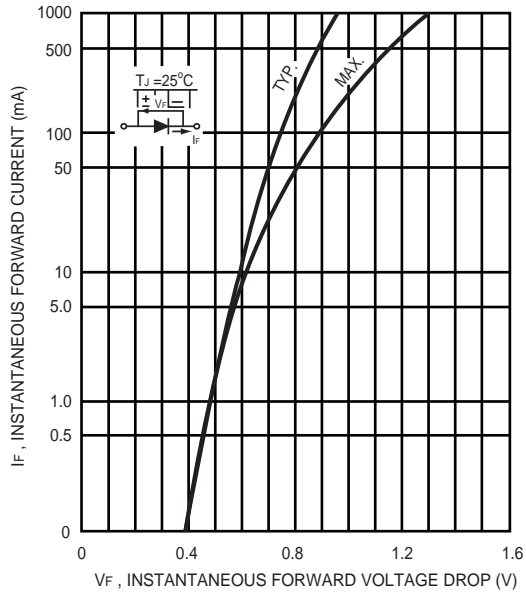


FIG. 2 - TYPICAL THERMAL RESISTANCE CHARACTERISTICS

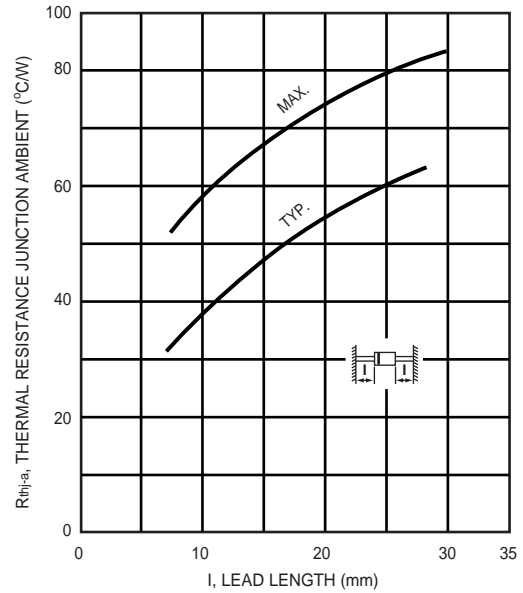


FIG. 3 - TYPICAL FORWARD CURRENT DERATING CURVE

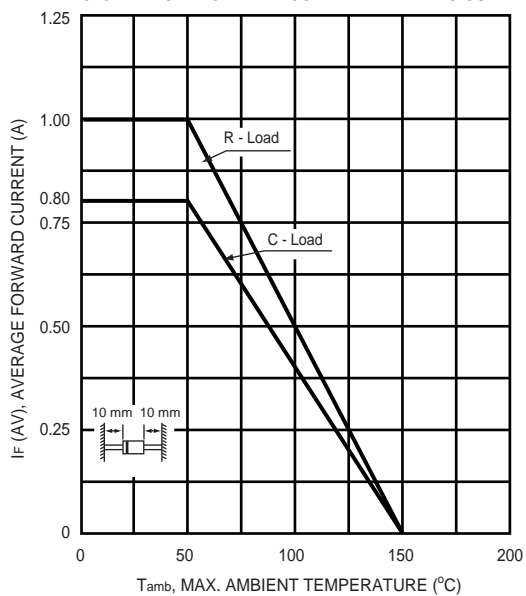


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

