

CE

CHENYI ELECTRONICS

FR151 THRU FR157**FAST RECOVERY RECTIFIER**

Reverse Voltage - 50 to 1000 Volts

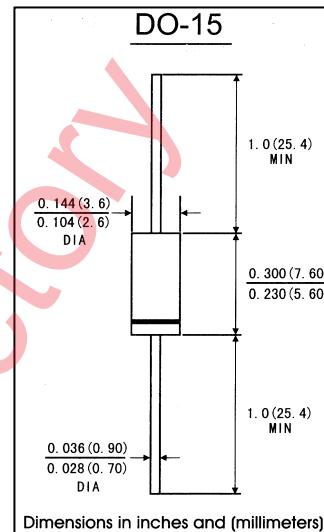
Forward Current - 1.5 Amperes

FEATURES

- . Fast switching
- . Low leakage
- . Low forward voltage drop
- . High current capability
- . High current surge
- . High reliability

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, 0.39 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

(Ratings at 25°C ambient temperature unless otherwise specified,Single phase,half wave 60Hz,resistive or inductive)

load. For capacitive load,derate current by 20%)

	Symbols	FR151	FR152	FR153	FR154	FR155	FR156	FR157	Units
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	100	Volts
Maximum average forward rectified current 0.375"(9.5mm)lead length at T _A =75°C	I _(AV)						1.5		Amp
Peak forward surge current 8.3ms sing-wave superimposed on rated load (JEDEC method)	I _{FSM}						60.0		Amps
Maximum instantaneous forward voltage at 1.5 A	V _F					1.3			Volts
Maximum DC Reverse Current at rated DC blocking voltage						5.0			
Maximum full load reverse current full cycle average. 0.375"(9.5mm)lead length at T _L =55°C	I _R					40.0			μ A
Maximum reverse recovery time(Note 1)	T _{rr}			150		250	500		ns
Typical junction Capacitance(Note 2)	C _J			15.0					pF
Operating and storage temperature range	T _J T _{STG}			-65 to +150					°C

Notes: 1.Test conditions:I_F=0.5A,I_R=1.0A,I_{rr}=0.25A.

2.Measured at 1MHz and applied reverse voltage of 4.0V Volts

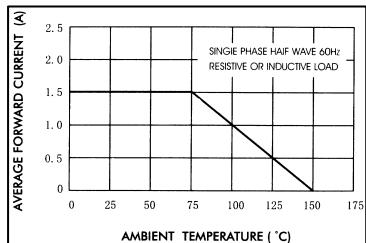
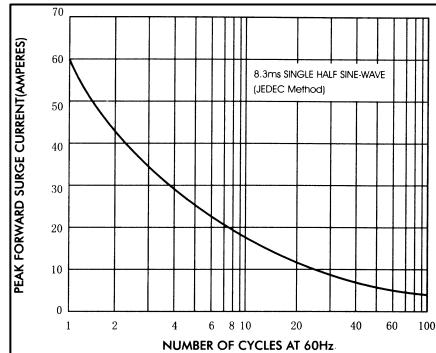
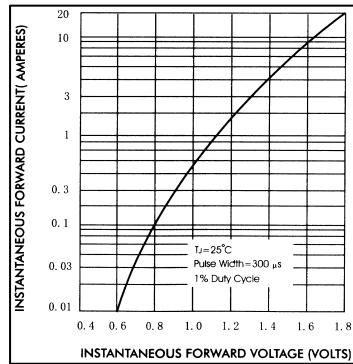
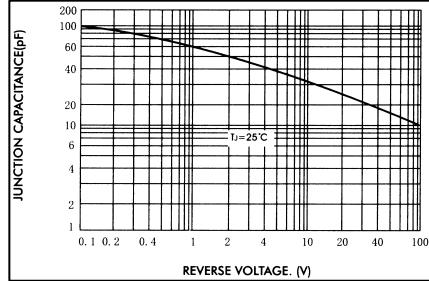
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RATINGS AND CHARACTERISTIC CURVES FR151 THRU FR157**FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE****FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT****FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS****FIG.4-TYPICAL JUNCTION CAPACITANCE****FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**