

**Voltage Range 50 to 1000 V**

**Current 1.5 Ampere**

**Features**

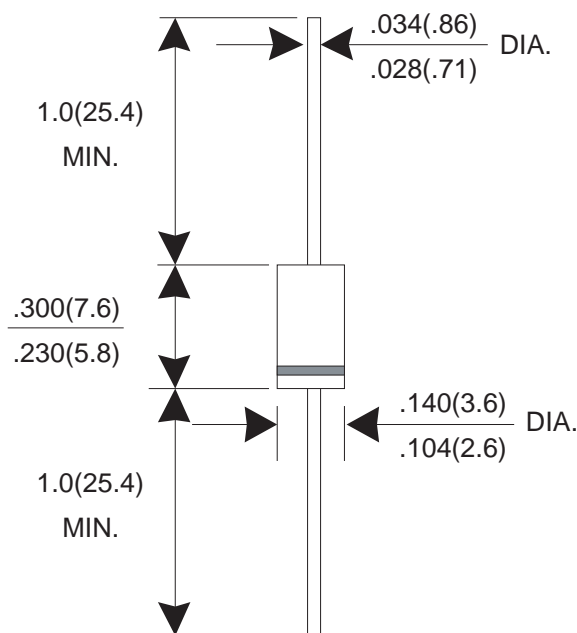
- Fast switching for high efficiency
- Low forward voltage drop
- High current capability
- Low reverse leakage current
- High surge current capability

**Mechanical Data**

- Case: Molded plastic DO-15
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Solderable per MIL-STD-202 method 208 guaranteed
- Polarity: Color band denotes cathode
- Mounting position: Any
- Weight: 0.4 gram

**Dimensions in inches and (millimeters)**

**DO-15**



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMTER	SYMBOL	TUF 151G	TUF 152G	TUF 153G	TUF 154G	TUF 155G	TUF 156G	TUF 157G	UNIT	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current $T_L=55^\circ\text{C}$	IF(AV)	1.5							A	
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	50							A	
Maximum Instantaneous Forward Voltage @ 1.5 A	VF	1.0		1.3		1.7			V	
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_J=125^\circ\text{C}$	IR	5.0				100				uA uA
Maximum Reverse Recovery Time (Note 1)	Trr	50				75				nS
Typical junction Capacitance (Note 2)	CJ	30							pF	
Typical Thermal Resistance (Note 3)	RθJA	25							°CW	
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to +150							°C	

NOTES : (1) Reverse recovery test conditions  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{rr} = 0.25\text{A}$ .  
 (2) Thermal Resistance junction to lead.  
 (3) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

RATING AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

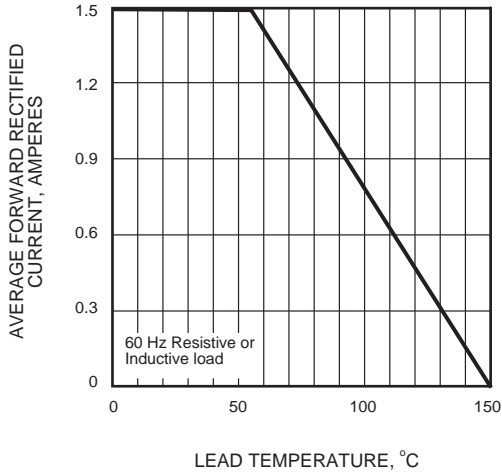


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

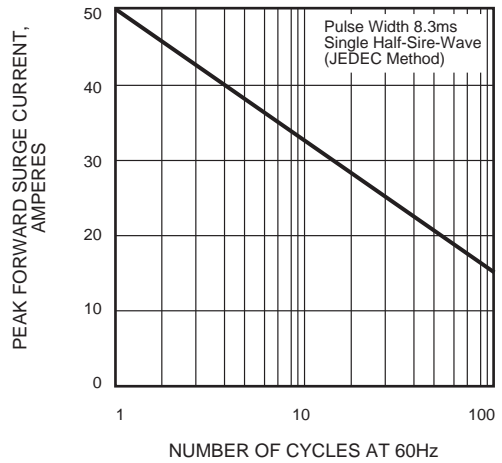


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

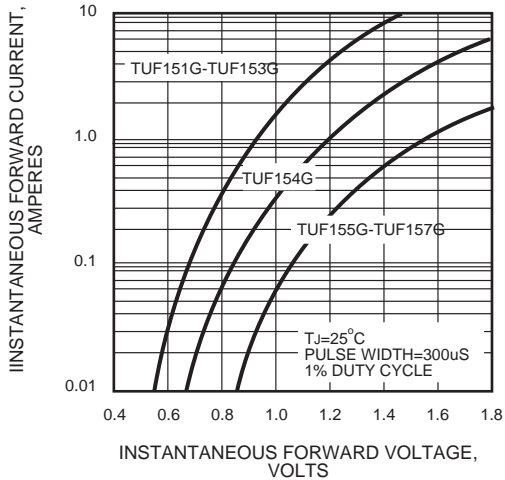


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

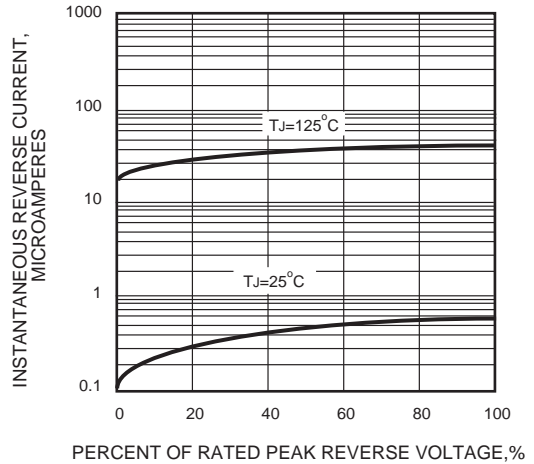


FIG.5 - TYPICAL JUNCTION CAPACITANCE

