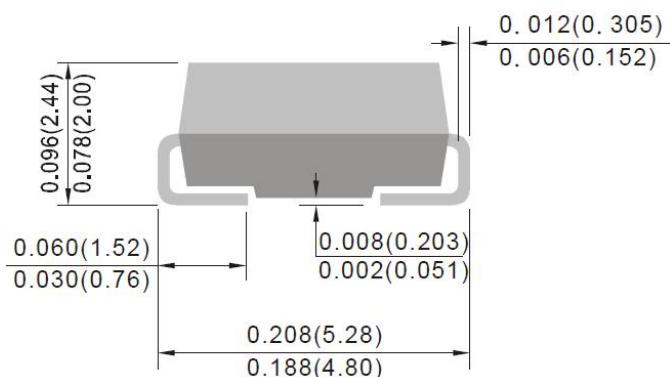
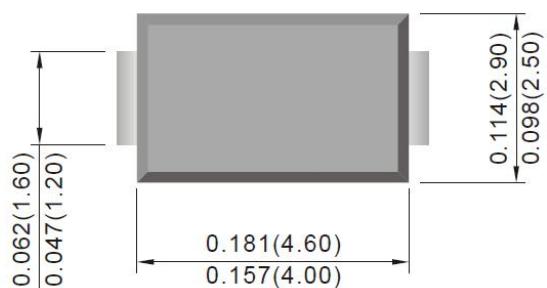




DO-214AC



## ■ ■ FEATURES

- The plastic package carries Underwriters Laboratory
- Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed;
- 25°C/10 seconds at terminals

## ■ ■ MECHANICAL DATA

**Case:** JEDEC DO-214AC molded plastic body

**Terminals:** Solder plated, solderable per

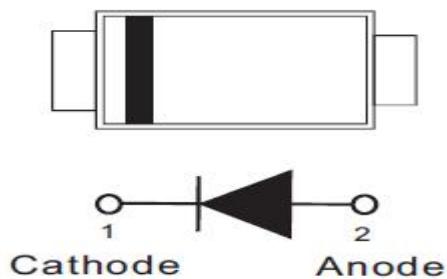
MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.003 ounce, 0.093 grams

## ■ ■ PIN ASSIGNMENT



**■ ■ 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 current derate by 20%.

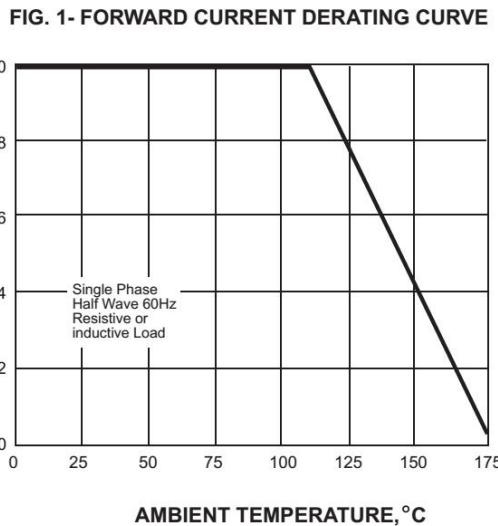
CHARACTERISTIC	SYMBOL	DX1N	DX1N	DX1N	DX1N	DX1N	DX1N	DX1N	UNIT
		4001L	4002L	4003L	4004L	4005L	4006L	4007L	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at TL=110 °C	I <sub>(AV)</sub>					1.0			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>					30			A
Maximum instantaneous forward voltage at 1.0A	V <sub>F</sub>					1.1			V
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=100°C	I <sub>R</sub>					5			uA
Typical junction capacitance (NOTE 1)	C <sub>J</sub>				75				pF
Typical thermal resistance (NOTE 2)	R <sub>θJA</sub>				45				°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>				-50~+150				°C

**Note:**1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

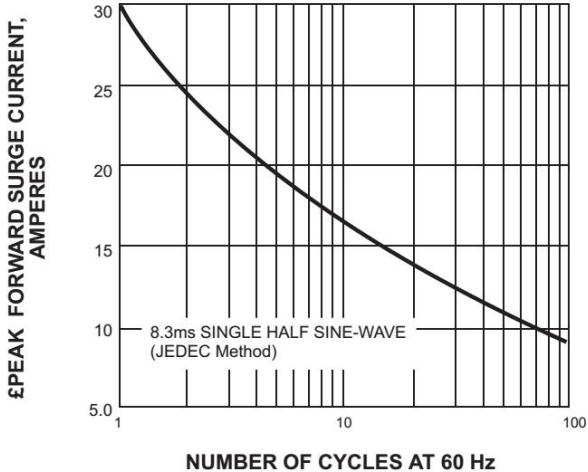
## ■ ■ RATINGS AND CHARACTERISTIC CURVES M1 THRU M7

AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES



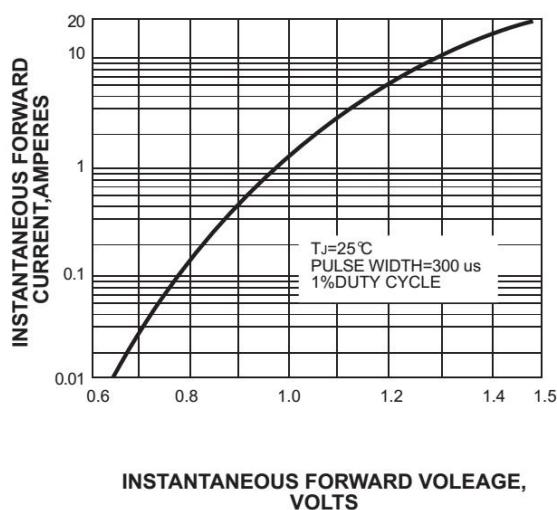
AMBIENT TEMPERATURE, °C

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



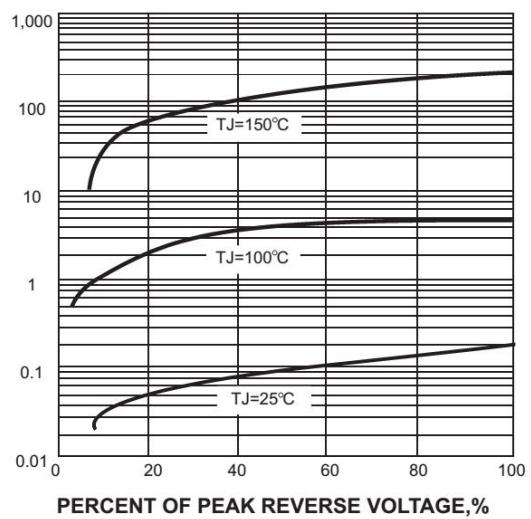
NUMBER OF CYCLES AT 60 Hz

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



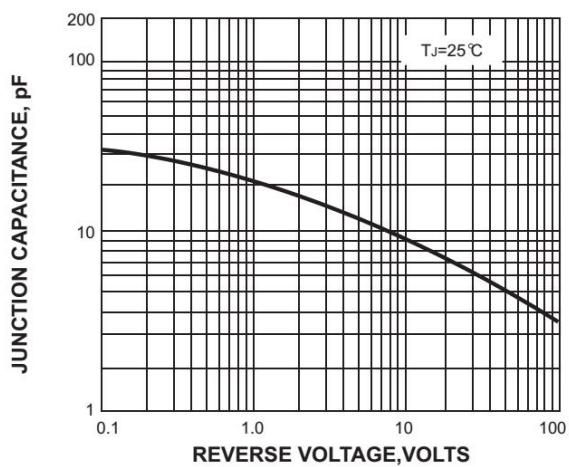
INSTANTANEOUS FORWARD VOLEAGE,  
VOLTS

INSTANTANEOUS REVERSE CURRENT,  
MICROAMPERES



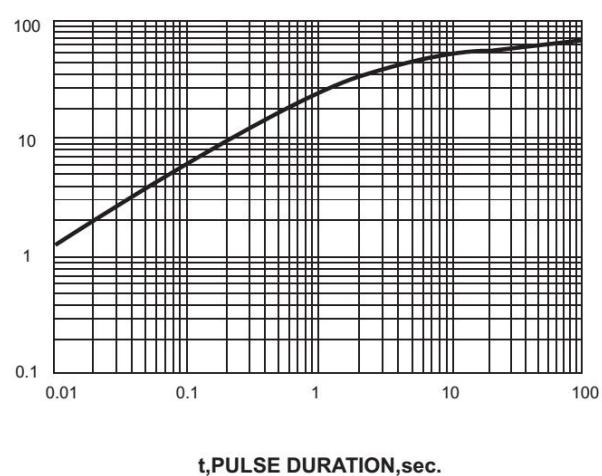
PERCENT OF PEAK REVERSE VOLTAGE, %

FIG. 5-TYPICAL JUNCTION CAPACITANCE



REVERSE VOLTAGE, VOLTS

TRANSIENT THERMAL IMPEDANCE,  
°C/W



t, PULSE DURATION, sec.