

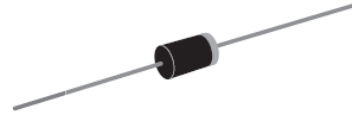


GENERAL PURPOSE RECTIFIER BY127~BY133

General Purpose Rectifier

Features

- High reverse voltage
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capacity
- High temperature soldering guaranteed: 250°C/10 seconds 0.375" (9.5mm) lead length
- RoHS and REACH compliance



DO204AL
(DO-41)

RoHS
COMPLIANT

Mechanical Data

Case:	DO-204AL(DO-41), transfer molded plastic
Epoxy:	UL94V-0 rate flame retardant
Terminals:	Solderable per MIL-STD-202E, Method 208C
Polarity:	Color band denotes cathode end
Mounting position:	Any
Weight:	0.012 Ounce, 0.33 gram

Maximum Ratings ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	BY127	BY133	Unit	Conditions
VRRM	Non-Repetitive Peak Reverse Voltage	1250	1300	V	
VRMS	Maximum RMS Voltage	875	910	V	
VDC	Maximum DC Blocking Voltage	1250	1300	V	
I(AV)	Maximum Average Forward Rectifier Current	1.0		Amps	0.375"(9.5mm) at TA=75°C (note 1)
IFSM	Peak Forward Surge Current	30		Amps	8.3mS Single half sine wave (JEDEC method)
TJ, TSTG	Operating and Storage Temperature	-55 to +155		°C	
IR	Maxmum DC Reverse Current at Rated DC Blocking Voltage per element	5.0		µA	TA=25°C
		50			TA=100°C

Electrical Characteristics ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description		Unit	Conditions
V_F	Max Instantaneous Forward Voltage	1.1	V	1.0A
$I_R(AV)$	Maximum Full Load Reverse Current	30	μA	Full cycle average 0.375"(9.5mm) lead length at $T_L=75^{\circ}\text{C}$
C_J	Typical Junction Capacitance	15	pF	1.0MHz & 4.0V
$R_{\theta-JA}$	Typical Thermal Resistance	50	°C/W	Note 1

Note:

1. Thermal resistance from junction to ambient with 0.375" (9.5mm) lead length, PCB mounted

Ratings and Characteristic Curves

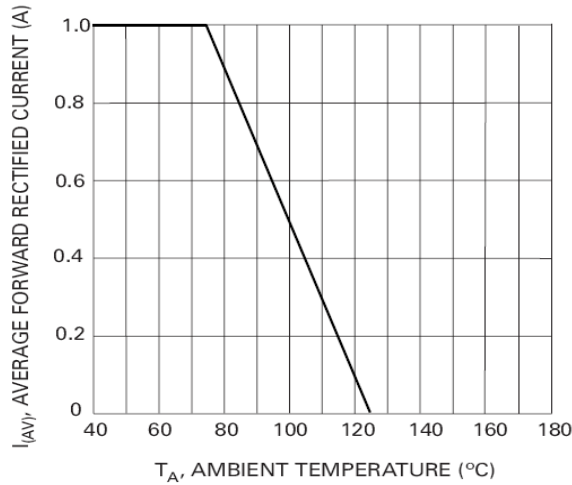


Fig. 1 Forward Current Derating Curve

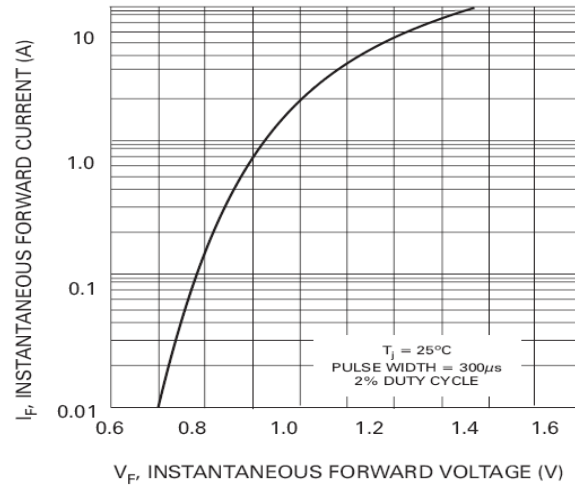


Fig. 2 Typical Forward Characteristics

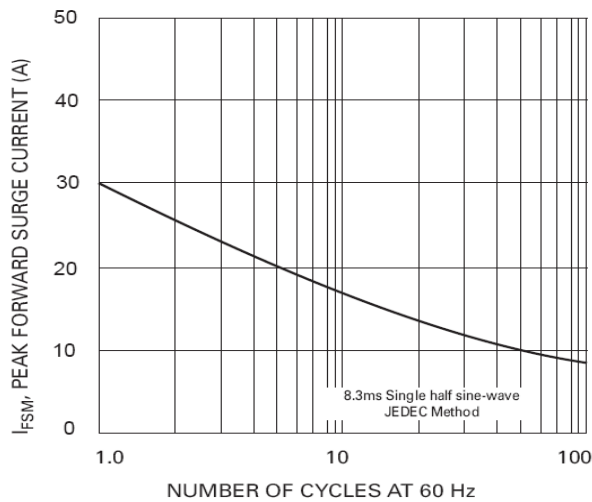


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

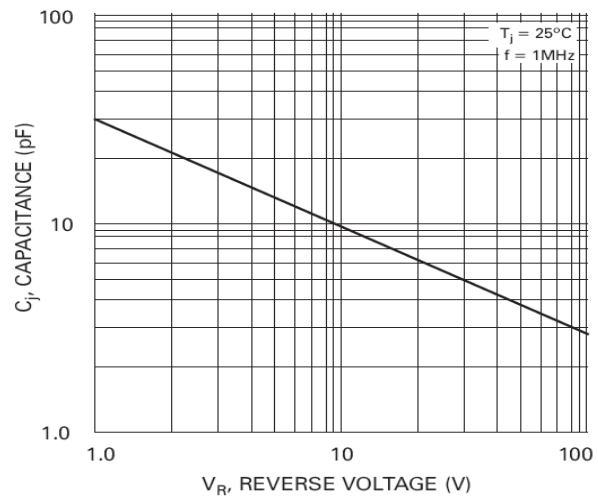
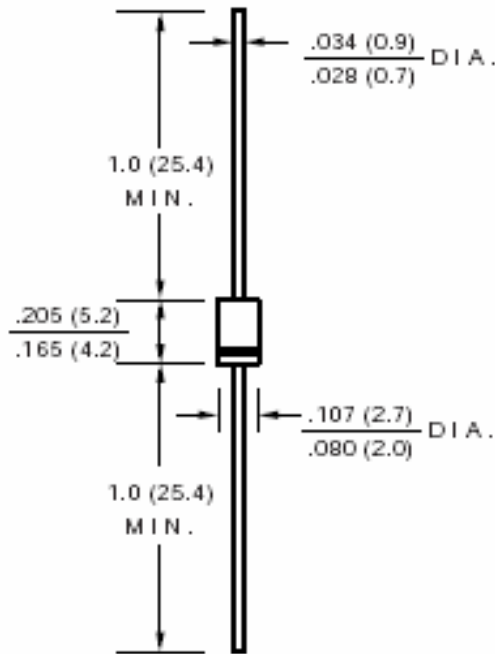


Fig. 4 Typical Junction Capacitance

Dimensions in inch (mm)

**DO-204AL(DO-41)****Contact us:****US HEADQUARTERS****MEI SEMI INC.****2902** Corvin Drive, Santa Clara, CA95051, USA

Tel: 1-408-733-0808 Fax: 1-408-733-2828