



*DC COMPONENTS CO., LTD.*

RECTIFIER SPECIALISTS

DL60P

**TECHNICAL SPECIFICATIONS OF SMALL SIGNAL SCHOTTKY DIODES**

**FEATURES**

- \* Metal silicon junction, majority carrier conduction.
- \* High current capability, low forward voltage drop.
- \* Extremely low reverse current  $I_R$ .
- \* Ultra speed switching characteristics.
- \* Small temperature coefficient of forward characteristics.
- \* Satisfactory Wave detection efficiency.
- \* For use in RECORDER, TV, RADIO, TELEPHONE as detectors, super high speed switching circuits, small current rectifier.

**MECHANICAL DATA**

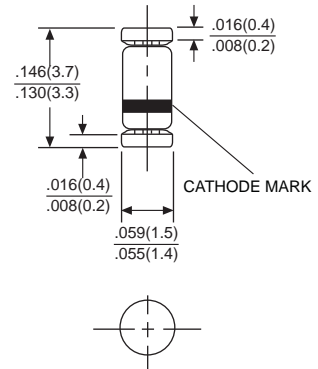
- \* Case: DL-35 glass case.
- \* Polarity: color band denotes cathode end.
- \* Weight: 0.05 grams approx.

**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%.



Mini Melf(DL-35)



Dimensions in inches and (millimeters)

**ABSOLUTE RATINGS(LIMITING VALUES)**

PARAMETERS		SYMBOL	VALUE	UNITS
Repetitive Peak Reverse Voltage		$V_{RRM}$	40	Volts
Forward Continuous Current	$T_A=25^{\circ}C$	$I_F$	50	mA
Peak Forward Surge Current(t=1S)		$I_{FSM}$	400	mA
Storage and junction Temperature Range		$T_{STG}/T_J$	-55 to +125	°C
Maximum Lead Temperature for Soldering during 10S at 4mm from Case		$T_L$	230	°C

**ELECTRICAL CHARACTERISTICS**

PARAMETERS	TEST CONDITIONS	SYMBOL	VALUE		UNITS
			TYP.	MAX.	
Forward Voltage	$I_F=1mA$	$V_F$	0.26	0.5	Volts
	$I_F=200mA$		0.70	1.0	
Reverse Current	$V_R=15V$	$I_R$	0.5	10	μA
Junction Capacitance	$V_R=10V$ $f=1MHz$	$C_J$	10		pF
Detection Efficiency	$V_I=3V$ $f=30MHz$ $C_L=10pF$ $R_L=3.8K\Omega$	$\eta$	60		%
Reverse Recovery time	$I_F=I_R=1mA$ $I_{rr}=1mA$ $R_C=100\Omega$	$t_{rr}$		1	ns
Junction Ambient Thermal Resistance		$R_{\theta JA}$	400		°C/W

# RATING AND CHARACTERISTIC CURVES (DL60P)

FIG.1  
FORWARD CURRENT VERSUS  
FORWARD VOLTAGE (TYPICAL VALUES)

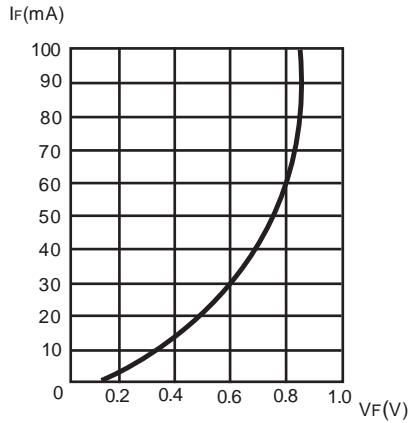


FIG. 2  
REVERSE CURRENT VERSUS  
CONTINUOUS REVERSE VOLTAGE

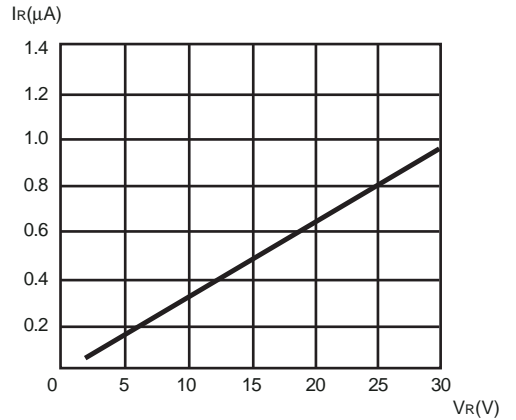


FIG. 3  
JUNCTION CAPACITANCE VERSUS  
CONTINUOUS REVERSE APPLIED VOLTAGE

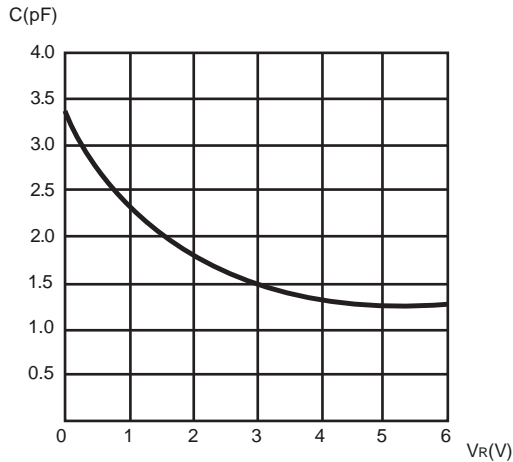
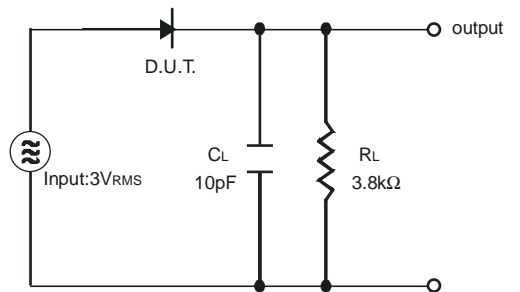


FIG. 4  
DETECTION EFFICIENCY MEASUREMENT CIRCUIT



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