

**Schottky Barrier Rectifiers**

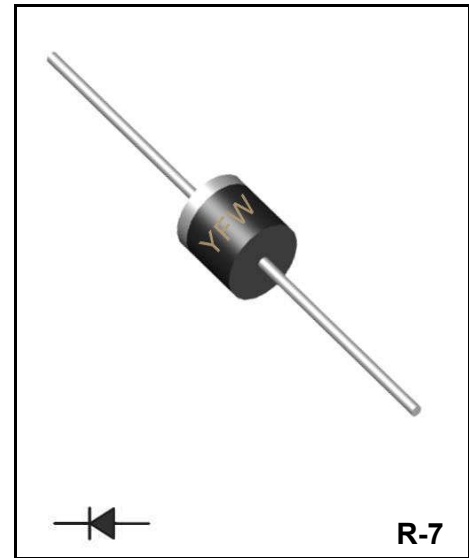
**Reverse Voltage - 45V**  
**Forward Current - 40A**

**FEATURES**

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Guardring for overvoltage protection
- ◆ Low forward voltage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed 260°C/10 seconds at terminals

**MECHANICAL DATA**

- ◆ Case : Molded plastic body
- ◆ Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
- ◆ Polarity : Polarity symbol marking on body
- ◆ Mounting Position : Any



**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%.

Parameter	SYMBOLS	40SQ045	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	45	V
Maximum RMS voltage	$V_{RMS}$	31.5	V
Maximum DC blocking voltage	$V_{DC}$	45	V
Maximum average forward rectified current	$I_{(AV)}$	40.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	500.0	A
Maximum instantaneous forward voltage at 40.0A	$V_F$	0.55	V
Maximum DC reverse current at rated DC blocking voltage	$I_R$	0.2 20	A
Typical thermal resistance	$R_{qJC}$	2.5	°C/W
Operating junction temperature range	$T_J$	-55 to +200	°C
Storage temperature range	$T_{STG}$	-55 to +150	°C

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

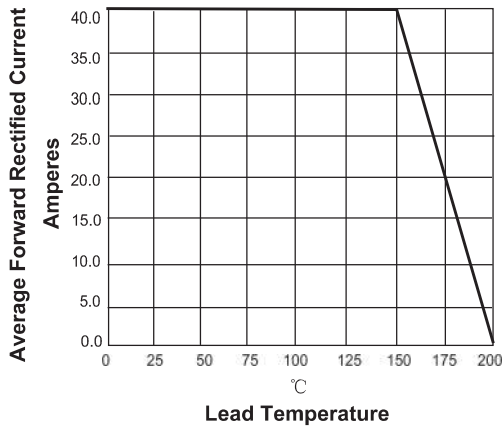


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

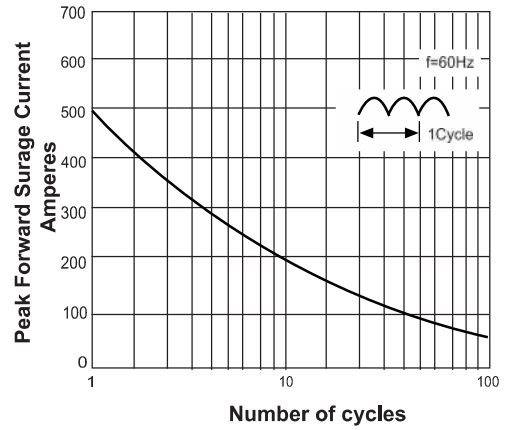


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

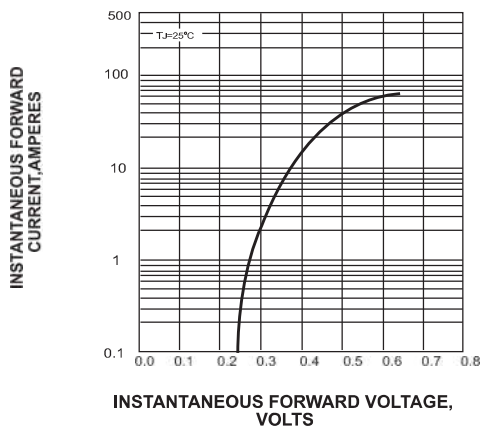
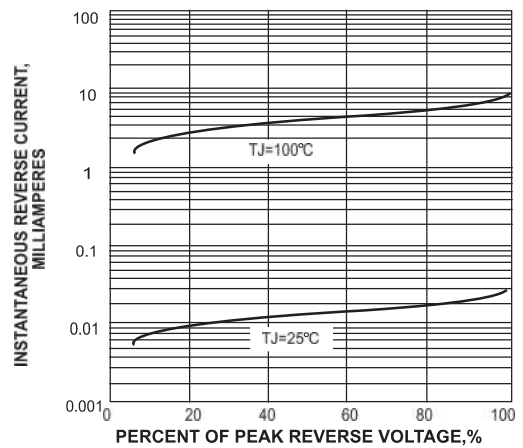


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



**Ordering information**

Package	Packing Description	Packing Quantity
R-7	ammo pack	500PCS/Inner Box 5000PCS/Carton

**Package Dimensions**

R-7

Dim.	Millimeter(mm)		INCHES	
	Min.	Max.	Min.	Max.
A	8.60	9.10	0.340	0.360
B	8.60	9.10	0.340	0.360
C	1.20	1.30	0.048	0.052
D	25.40	-	1.00	-

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