

Schottky Barrier Rectifiers

Reverse Voltage - 30 to 100 V

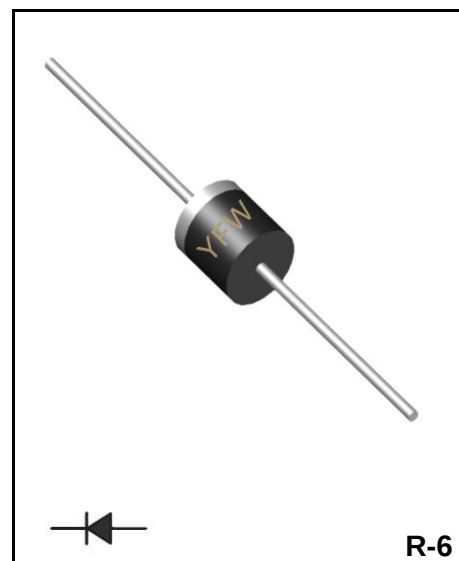
Forward Current - 10 A

FEATURES

- ◆ Guardring for overvoltage protection
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed
250°C /10 seconds at terminals
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆ Case: R-6
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 2.05g /0.072oz



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 current derate by 20 %.

Parameter	Symbols	10SQ030	10SQ035	10SQ040	10SQ045	10SQ060	10SQ080	10SQ100	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	30	35	40	45	60	80	100	V
Maximum RMS voltage	V _{RMS}	21	24.5	28	31.5	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	30	35	40	45	60	80	100	V
Maximum Average Forward Rectified Current at T _c = 100 °C	I _{F(AV)}	10.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I _{FSM}	200.0							A
Maximum Instantaneous Forward Voltage at 10A	V _F	0.55				0.70	0.85		V
Maximum DC Reverse Current T _a = 25 °C at Rated DC Blocking Voltage T _a =125 °C	I _R	0.5 50					0.05 10		mA
Typical Thermal Resistance	R _{θJA}	40.0							°C/W
Operating junction temperature range	T _j	-55 ~ +150							°C
Storage Temperature Range	T _{stg}	-55 ~ +150							°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

Ratings and Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

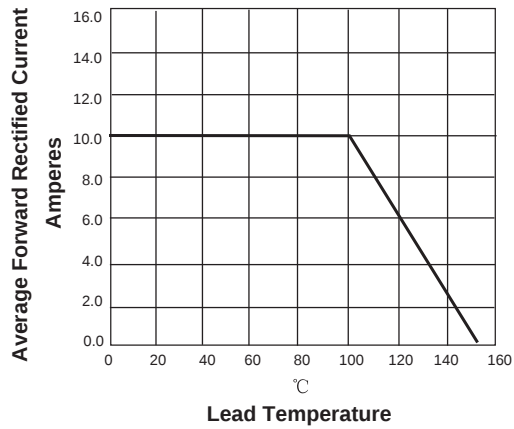


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

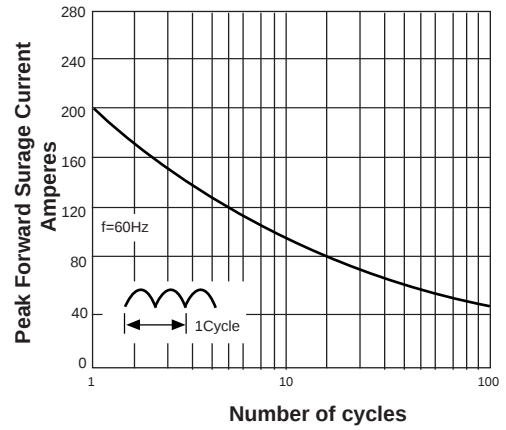


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

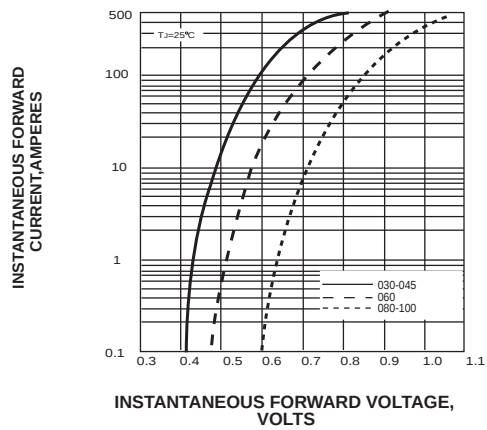
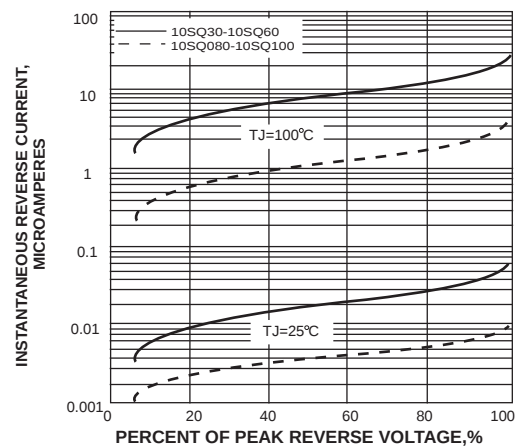


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



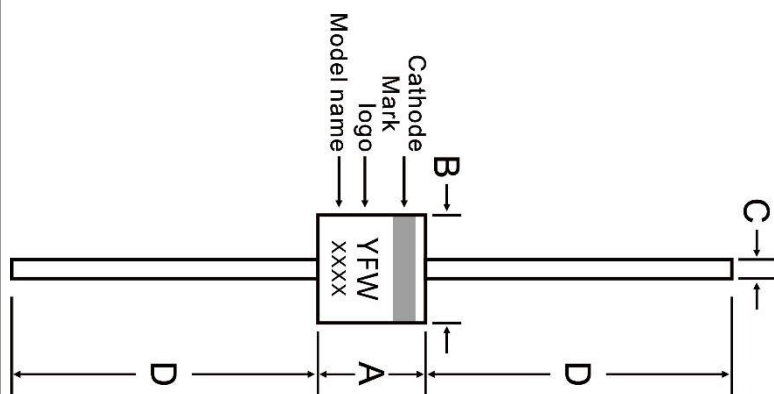
Ordering information

Package	Packing Description	Packing Quantity
R-6	bulk	100PCS/Inner Box 5000PCS/Carton
	ammo pack	500PCS/Box 5000PCS/Carton

Package Dimensions

R-6

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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