

Pb Free Plating Product

KCH30A15/KRH30A15/KDH30A15/KSH30A15



30.0 Ampere Heatsink Dual Switch Mode Schottky Barrier Rectifiers

**FEATURES**

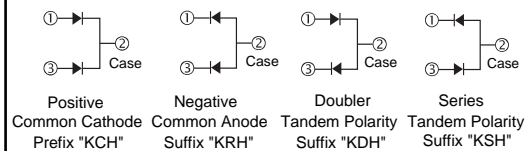
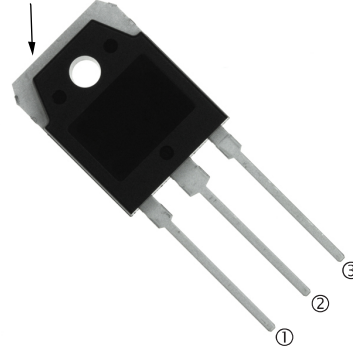
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency.
- High current capability
- Guardring for overvoltage protection
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- In compliance with EU RoHS 2002/95/EC directives

**MECHANICAL DATA**

- Case: TO-3PN/TO-3PB package outline
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any
- Weight: 0.2245 ounces, 6.3673 gram approximately

**TO-3PN/TO-3PB**

② Bottom Side Metal Heat Sink

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

<i>Ratings at 25 °C ambient temperature unless otherwise specified.</i>	SYMBOLS	KCH30A15	KRH30A15	KDH30A15	KSH30A15	UNITS
Maximum repetitive peak reverse voltage	VRRM	150				Volts
Maximum RMS voltage	VRMS	105				
Maximum DC blocking voltage	VDC	150				
Maximum average forward rectified current	I (AV)	30				Amps
Peak repetitive forward current (rated VR, square wave, 20KHz)	IFM	30				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	275				Amps
Maximum instantaneous forward voltage @ IF= 15 A	VF	T <sub>J</sub> =25°C T <sub>J</sub> =125°C	0.90 0.75			Volts
Maximum DC reverse current at rated DC blocking voltage	IR	@T <sub>J</sub> =25°C @T <sub>J</sub> =125°C	0.005 1.0			mA
Typical junction capacitance (Note)	CJ	250				pF
Typical thermal resistance	R JA	1.4				/ W
Operating junction temperature	TJ	175				
Storage temperature range	TSTG	-55 to +200				

Note : Measured at 1.0MHz and applied reverse voltage of 4.0V.

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG.1 - FORWARD CURRENT DERATING CURVE

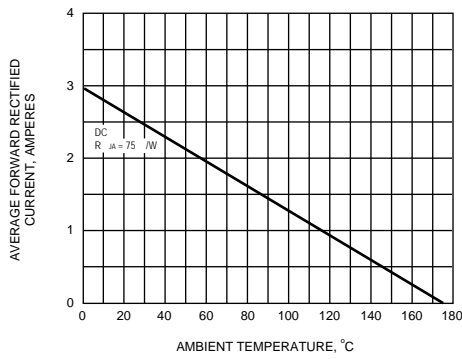


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

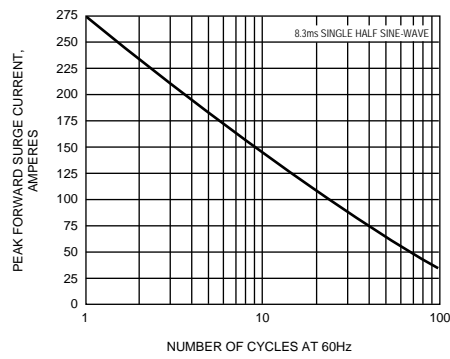


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

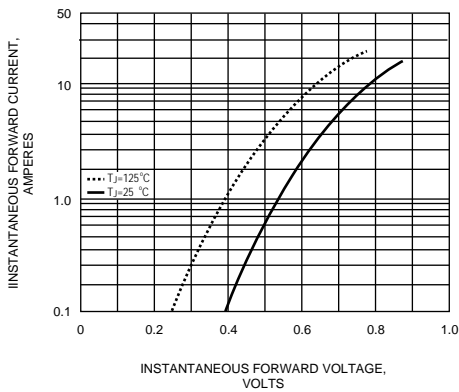


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

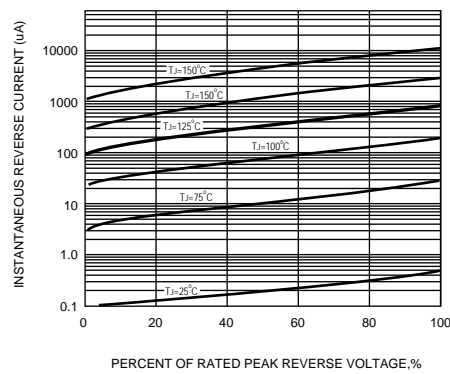


FIG.5 - TYPICAL JUNCTION CAPACITANCE

