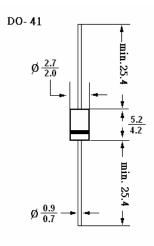
## **SILICON RECTIFIERS** Reverse Voltage - 1600 to 2000 Volts Forward Current - 1.0 Ampere

#### **Features**

Plastic case in DO-41 package.



Dimensions in mm

### Absolute Maximum Ratings (T<sub>a</sub> = 25°C)

	Symbols	EM 513	EM 516	EM 518	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	1600	1800	2000	V
Maximum RMS voltage	$V_{RMS}$	1120	1260	1400	V
Maximum DC blocking voltage	V <sub>DC</sub>	1600	1800	2000	V
Maximum average forward rectified current , .375"(9.5mm) lead length T <sub>A</sub> =75°C	I <sub>FAV</sub>	1			А
Peak forward surge current , 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30			А
Maximum forward voltage at I <sub>F</sub> = 1.0A DC	V <sub>F</sub>	1.1			V
Maximum leakage current at $T_A = 25$ $^{\circ}$ C at rated DC blocking voltage at $T_A = 100$ $^{\circ}$ C	I <sub>R</sub>	5 500			μA μA
Typical junction capacitance (Note 1)	CJ	15			pF
Typical thermal resistance (Note 2)	R <sub>thA</sub>	50			K/W
Operating and storage temperature range	T <sub>J</sub> ,T <sub>S</sub>	-55 to +150			$^{\circ}$ C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0VDC.

2. Thermal resistance junction to ambient 0.375"(9.5mm) lead length P.C.B. mounted.

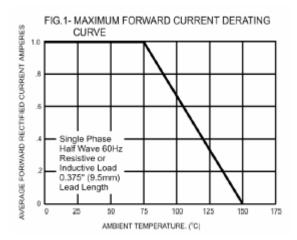


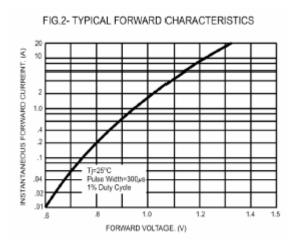


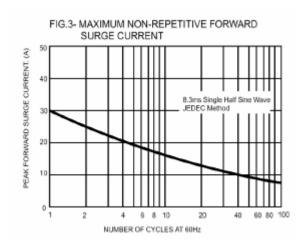


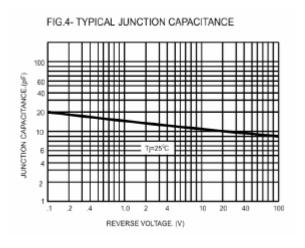


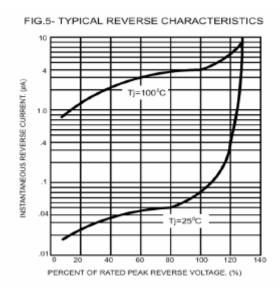
# EM513, EM516, EM518













# SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)







Dated: 06/08/2005 H